AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
J	1 OF ~~1102~~ 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00041	SEE BLOCK 16C.		

6. ISSUED BY CODE N00039

SPACE AND NAVAL WARFARE SYSTEMS COMMAND
CONTRACTING OFFICER: 02-N ELLEN H. POLEN
4301 PACIFIC HIGHWAY, OT-4, ROOM 2082B
SAN DIEGO, CA 92110-3127
PHONE: (619) 524-7388

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, country, State and ZIP Code)*

ELECTRONIC DATA SYSTEMS CORPORATION
13600 EDS DRIVE
MS: A5S-B48
HERNDON, VA 20171
ATTM: NMCI CONTRACTS

CODE 1U305 FACILITY CODE

(✔)	
	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
X	10A. MODIFICATION OF CONTRACT/ORDER NO. N00024-00-D-6000
	10B. DATED *(SEE ITEM 11)* 06 October 2000

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
NOT APPLICABLE

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(✔)	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR CLAUSE 52.212-4 (CHANGES)
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return ORIGINAL copies to the issuing office..

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

-SEE HEREIN-

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
KEITH SPENCER, NMCI Contract Manager	ELLEN H. POLEN, NMCI Contracting Officer

15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)	10 APR 2002	BY *(Signature of Contracting Officer)*	10 Apr 2002

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

30-105

STANDARD FORM 30 (REV. 10-83)
FAR (48 CFR) 53.243

1. The purpose of this modification is to delete Attachment 2, Service Level Agreements, in its entirety and replace with the Attachment 2, Revision 1, Service Level Agreements, incorporated herein and made a part hereof.

2. This modification will not impact CT&E; SLAs existing under the contract (heretofor referred to Attachment 2) will be used for CT&E.

3. This modification will not impact 20,000 NMCI seats to be cutover as part of the Contract Section 2.1(d); existing SLAs under Attachment 2 will be used for the 20,000 NMCI seats to be cutover.

4. The Government and Contractor will define a mutually agreeable Interoperability Test Plan (ITP) based on the revised Interoperability reporting requirements.

5. SLA performance pursuant to Attachment 2, Revision 1, will be effective subsequent to performance of 2. and 3. above.

A CONFORMED COPY OF THE REVISED CONTRACT IS MADE A PART OF THIS MODIFICATION AS A RESULT OF THE CHANGES OUTLINED HEREIN.

All other terms and conditions of Contract N00024-00-D-6000 remain unchanged, and in full force and effect.

N/MCI Contract N00024-00-D-6000
Awarded 6 October 2000

Attachment 2
Service Level Ag

Attachment 2
Revision 1
Service Level Agreements
P00041

1. **This Attachment 2, Revision 1 to contract N00024-00-D-6000 will not impact CT&E; SLAs existing under the contract (heretofor referred to Attachment 2) will be used for CT&E.**

2. **This Attachment 2, Revision 1 to contract N00024-00-D-6000 will not impact 20,000 NMCI seats to be cutover as part of the Contract Section 2.1(d); existing SLAs under Attachment 2 will be used for the 20,000 NMCI seats to be cutover.**

3. **The Government and Contractor will define a mutually agreeable Interoperability Test Plan (ITP) based on the revised Interoperability reporting requirements.**

4. **SLA performance pursuant to this Attachment 2, Revision 1, will be effective subsequent to performance of 1. and 2. above.**

Summary of Proposed Changes for Optimal Solution SLAs in Attachment 2

None of the proposed changes will impact the Mission Critical Seat SLAs. SLAs 23 and 36C apply to all of the CLINs that refer to them from the Solicitation Document, Part 1, CLIN descriptions. SLAs 1, 15 and 28 are applicable **ONLY** to the Remote User CLIN (0001AE and 0101AE if the Option is exercised). The category within those SLAs that apply to the Remote Users is designated with an "A" beside the Category number.

SLA	SLA Name	Cat.	SLA Performance Category	LOS	RFP B Value	Optimal B Value
1	Desktop Hardware and Operating System	3A	Problem Resolution	1 2 3	1 Bus. Day 1 Bus. Day 4 Hours	2 Bus. Days 2 Bus. Days No Change
15	MACs	1A	Responsiveness	1 2 3	<=4 Days <=3 Days <=2 Days	<=6 Days <=5 Days No Change
23	Basic Help Desk Services	1.2	Responsiveness —(Abandon Rate)	1 2 3	Less than 5% Less than 5% Less than 5%	Less than 7% Less than 7% No Change
28	Network Management Service—Asset Mgmt.	1A	Time to implement asset	1 2 3	92% 92% 92%	85% 85% No Change
28	Network Management Service—Asset Mgmt.	2A	Time to remove asset	1 2 3	<15 Days <15 Days <15 Days	<25 Days <20 Days No Change
36C	Technology Refreshment	3	Average Relative Performance of Refreshment Workstations	1AA 1AB 1AC 1AD	75% 75% 75% 75%	75% 65% 60% 50%

Attachment 2 – Industry Standard Target Performance Measures

The NMCI will rely on the concept of Service Level Agreements (SLAs) to ensure mutual Government and provider understanding of the services to be provided and to ensure that stakeholder and user expectations are satisfactorily defined and executed. While many of the services emphasize end-to-end performance from a user perspective, a number of enterprise level services are viewed as mission critical and equally important to be measured.

The baseline service performance values for selected NMCI services are provided as a basis for comparison of offeror submissions to establish a bid-to environment for purposes of competitive range determination. Each performance value is based on the industry best practice values. These nominal values are reported to be those most used by equivalent or similar commercial service implementations.

The Table of Contents shows the list of the NMCI services required. Of the total list, 44 services are indicated by corresponding SLA numbers, and have baseline performance metrics provided in the attachment. This revision 4 to the SLAs indicates modifications, additions, and deletions in red text, line in-lineout format from the second baseline established 4/28/00 Amendment 10.

The SLAs presented here do not directly address the unpriced option services contained in the RFP. Where unpriced options are exercised by NMCI customers, their accompanying SLAs will be developed using the SLAs contained here as the entering baseline. The resulting SLAs will include any adds or changes to accommodate additional or customer specific requirements.

A number of general observations and principles became apparent during the development of the NMCI service performance metrics.

- Performance of the network must be expressed in terms of measures that the NMCI vendor can control and measure.
- Performance of the network should be generally described in terms of the varying support required for the classes of applications, i.e., mission critical, mission support, local unique.
- Performance values for each of the components of the network must be individually factored to derive the overall end-to-end performance of the network.
- The end user cares about end-to-end performance; the Government additionally cares about other aspects of the network not visible to the end-user, such as surge capacity and redundancy.

The following constitutes general SLA guidance.

The preponderance of service delivery will take place on a continuous basis through the sole efforts of the contractor. It is recognized that certain elements of service delivery (e.g., SLAs 15 [MACs], 28 [Asset Management]) will require the physical participation of a government user or representative at times when they can be expected to be present. Unless otherwise specified by the PCO, the contractor shall measure SLAs relating to performance that does not require government participation or approval Monday-Sunday, 24X7. The contractor shall measure SLAs relating to performance that requires government participation or approval between Monday- Sunday, 7X24 for Basic, High End Level, and Mission Critical Service. If the customer is required to perform a function in the resolution process but is unavailable, the ticket status will be marked as "pending customer" for the period the customer is unavailable. Pending customer time will not be counted in the outage time.

- Some SLAs provide “on average” measurements, but this does not prevent large swings in service (i.e., several days significantly below average are offset numerically by many days above average, including possibly non-business days). As a consequence, the Government will desire to consider daily average reporting (to target SLA) with no greater than some negotiated percentage of daily measurements exceeding the target average.
- The SLAs do not specify calculation methods relating to service orders where multiple devices or units are represented. It can be assumed that multiple unit service orders will be weighted according to the number of devices in an order.
- Interoperability within NMCI and between NMCI and other DoD networks is critical to successful performance of NMCI. Many of the SLAs have an interoperability metric that is explained and implemented based on a Vendor recommended, Government approved Interoperability Test Plan.
- Customer satisfaction SLAs throughout are similar and the 85% target minimum is consistent with mature industry providers. A specified survey format will be developed and repetitively used to normalize responses. Also, 50% of any help desk survey-sampling group will have had at least one help desk call in prior period.
- SLAs that involve audit measurement will be performed in a manner that ensures that the sampling will provide for a statistically significant number of measurable responses.

- For SLAs that involve periodic (e.g., monthly) reporting of NMCI network and major systems, if there is a significant excursion from normal operational performance, the contractor will notify the Government immediately.
- Reporting of SLA performance is critical to keeping expectations aligned with results. If SLA performance levels drop below required values, the contractor is expected to explain the deviation and what actions on the part of the contractor or Government are necessary to return the SLA to the expected value.
- SLAs are expected to improve over time. Refreshment of the SLA performance metrics is very important to the Government and the contractor should have a formal plan in place to continuously evolve the SLAs. This may include replacement of SLAs that become inappropriate because of technology or topology.
- Where a service is described as being measured "at a server", this can refer to delivery from an individual server or a "cluster" of servers which, when operating in the NMCI environment, combine to deliver a "service" to the end user. The "service" is the object of the measurement.

Component availability is one of the primary service measurements incorporated in the NMCI SLAs. The intent is to ensure that both end-to-end availability as well as component availabilities are clearly being provided. It is significant to note that the scope and definition of each SLA availability differs and therefore, the metric values vary.

- Service availabilities such as E-mail, Directory, Newsgroup and Web are targeted at the performance of the associated servers, exclusive of the network.
- NMCI Intranet provides an end-to-end availability from NMCI end user to NMCI end user.
- Network availabilities such as NIPRNET, SIPRNET, and Internet are targeted at the last NMCI controlled point that provides connectivity to the portal.
- Wide Area Network measures only the availability of connectivity to the Wide Area Network portal.
- Base Area Network availability measures the connectivity between devices attached to a BAN.

The Information Assurance SLAs identified are representative of the target performance measures for the range of IA functionality provided with NMCI. The IA SLAs are in two categories – Security Planning Services and Security Operational Services. Because of their critical role in the DON, two of the operational services, Public Key Infrastructure and SIPRNET, have been broken out into separate SLAs. Some specific criteria still needs to be developed on how certain of the IA metrics will be measured. In any event, these SLAs are crucial to verifying that the required IA functionality is being implemented for NMCI.

NMCI Services (per Attachment 1)	Service Level Agreement (SLA) Provided
User Upgrades	
Desktop Hardware and Operating System	1
End User Services	
Standard Office Automation Software	2
E-mail Services	3
Directory Services	4
File Shared Services	5
Web Access Services	6
Newsgroup Services	7
Multimedia Capabilities Services	Deleted
Print Services	9
NMCI Intranet Performance	10
NIPRNET Access	11
Internet Access	12
Mainframe Access	13
Desktop Access to Government Apps	14
Moves, Adds, and Changes	15
Software Distribution and Upgrades	16
User Training	17
	Deleted
Unclassified Remote Access	18
Classified Remote Access	19
Portable Workstation Wireless Dial-in	20
Organizational Messaging Services	20A
Desktop VTC (hardware & software)	21
	Deleted
	Deleted
Voice Communications	22
Voice Mail	22A
Maintenance and Help Desk Services	
Basic Help Desk Services	23
Communications Services	
Wide Area Network Connectivity	24
BAN/LAN Communications Services	25
	Deleted
	Deleted
Moveable Video Teleconferencing Seat	26
	Deleted
Proxy and Caching Services	26A
External Networks	27
Systems Services	
Network Management System Services	28
Operational Support Services	29

Capacity Planning	30
Domain Name Server	31
Application Server Connectivity	32
Network Operations Display	32A
Information Assurance Services	
NMCI Security Operational Services General	33
NMCI Security Operational Services PKI	34
NMCI Security Operational Services SIPRNET	35
NMCI Security Planning Services	36
Advanced Application and IM Support	
	Delete
	Delete
Other Requirements	
Integrated Configuration Management	36A
Integration and Testing	36B
Technology Refreshment	36C
Technology Insertion	36D
Sea-Shore Rotation Support	
Sea-Shore Rotation Support Training	37

Service Name: Desktop Hardware and Operating System **SLA: 1**			
Service Description: Vendor provided desktop hardware and OS.			
Applicable Service Delivery Points: Fixed (basic, High End, Mission Critical) workstations, Portable Seats, Embarkable Portable Seats			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Installation Accuracy			
Performance Measure Description: Percentage of hardware or operating system installations/ upgrades successful on first use. Formula is: (# of desktop hardware installation/upgrades in month - # of 'failed/improper' installation/upgrades) / # of installation/upgrades in Month. The failed number includes wrong desktop, wrong OS version, improper configuration, failure to install/upgrade in designed time-window, etc, that are reported within 72 hours of completion of the seat installation checklist by the ISF technician and acceptance by a Government user. It excludes any network related failures if software loading performed from a central source. The measurement is an aggregate and average by site of the installation accuracy by similar seats as determined by trouble tickets at the Help Desk. The seat is installed properly unless the NMCI end user notifies the Help Desk informing of a failure.			
Who: Vendor		Frequency: Monthly	
Where: NMCI wide		How measured: Vendor includes all events of failed desktop hardware/OS installation/upgrades in monthly reports to the Government. It includes date, entity failed (desktop/OS) and user id for which it failed. The 'failed installation/upgrade' data will be audited by the Government or a designated third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.995	0.995	0.995
Performance Category 2: Availability			
Performance Measure Description: Basic desktop, including hardware and operating system, is up and capable of running software applications. Desktop up time is when end user is capable of performing basic desktop applications. Formula is: (# of hours in month X # of desktop - desktop outage time in hours) / (# of hours in month x # of desktops). The outage time includes all scheduled and unscheduled hardware and OS related outages. Exception is scheduled pre-agreed outage. The desktop is considered to be up (or available) unless there is a trouble ticket at the Help Desk. It assumes the availability of desktop is not dependent on network services. It measures ability to boot and perform basic execution and functions of the local resident applications within the confines of the desktop. The measurement is an aggregate and average by site.			
Who: Vendor		Frequency: Monthly	
Where: NMCI wide		How measured: Use of applications is basis for validating availability of hardware and operating system. Computation will be based on 7X24 and measured during a Government defined critical period, reflecting all vendor provided desktop h/w and OS outages, and provided in monthly reports to the Government. It includes date and time of outage and duration of outage. The outage event data will be audited by the Government or a designated third party.	

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.997	0.997	0.997
Level of Service (2)	0.997	0.997	0.997
Level of Service (3)	0.999	0.999	0.999

Performance Category 3: Problem Resolution			
Performance Measure Description: Elapsed time from the outage until the desktop hardware and operating system are restored to normal operating performance. The measurement will be an aggregate and average by site of the time to restore service following Help Desk notification. The values indicated represent total time to restore from time of non-availability (includes response time). Restoration is satisfied by repairing, replacing, or by assumption of functionality through a redundant system.			
Who: Vendor		Frequency: Continuous monitoring, monthly reported	
Where: NMCI-wide		How measured: Based on Help Desk logs and enterprise management system	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		1 business day	1 business day
Level of Service (2)		1 business day	1 business day
Level of Service (3)		4 hours	4 hours

Performance Category 3A: Problem Resolution for **Remote Users Only** (CLIN 0001AE and 0101AE if the Option is exercised)			
Performance Measure Description: Elapsed time from the outage until the desktop hardware and operating system are restored to normal operating performance. The measurement will be an aggregate and average by site of the time to restore service following help desk notification. The values indicated represent total time to restore from time of non-availability (includes response time). Restoration is satisfied by repairing, replacing, or by assumption of functionality through a redundant system.			
Who: Vendor		Frequency: Continuous monitoring, monthly reported	
Where: NMCI-wide		How measured: Based on help desk logs and enterprise management system	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		2 business days	2 business days
Level of Service (2)		2 business days	2 business days
Level of Service (3)		4 hours	4 hours

Performance Category 4: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey with statistically significant, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Standard Office Automation Software			**SLA: 2**
Service Description: Vendor provided standard desktop integrated software suite. It includes word processing, spreadsheet, presentation graphics, and database. These packages must interoperate across DON and within the Department of Defense.			
Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Installation Accuracy			
Performance Measure Description: Percentage of office automation software installations/upgrades successful on first use. Formula is: (# of office automation software installation/upgrades in month - # of 'failed/improper' installation/upgrades) / # of installation/upgrades in month. The failed number includes incorrect software version, improper configuration, failure to install/upgrade in designed time-window, etc, that are reported within 72 hours of completion of the seat installation checklist by the ISF technician and acceptance by a Government user. It excludes any network related failures if software loading performed from a central source. The measurement is an aggregate and average by site of the installation accuracy by similar seats as determined by trouble tickets at the Help Desk. The software is assumed to be installed properly unless the NMCI end user notifies the Help Desk informing of a failure. The measurement is an aggregate and average by site.			
Who: Contractor		Frequency: Monthly	
Where: NMCI-wide		How measured: Vendor includes all events of failed installation/upgrades in monthly reports to the Government. It includes date, software package and user/PC ID for which it failed. The 'failed installation/upgrade' data will be audited by the Government or a designated third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.995	0.995	0.995
Performance Category 2: Software Currency			
Performance Measure Description: Office automation software currency relative to industry standards. OA software standard across the enterprise. The metric values listed are qualified as follows: where a current NMCI software version falls 2 versions behind the latest commercially available release, then the contractor must upgrade the enterprise to the newest release within three months of the release of the new version, unless the Government determines otherwise. In the case where current NMCI software version has been implemented for greater than one year, and a more current version is available, the contractor will upgrade to the latest version within 3 months following the one year anniversary, unless the Government determines otherwise.			
Who: Government team		Frequency: Quarterly	
Where: Enterprise level		How measured: Analysis of NMCINMCI standard office automation software compared to state-of-the shelf office automation software, as determined by contractor/Government configuration control board.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	<= 1yr or 2 versions	<= 1yr and/or 2 versions	<= 1yr and/or 2 versions
Level of Service (2)	<= 1yr or 2 versions	<= 1yr and/or 2 versions	<= 1yr and/or 2 versions

Level of Service (3)	<= 1yr or 2 versions	<= 1yr and/or 2 versions	<= 1yr and/or 2 versions
Performance Category 3: Interoperability			
Performance Measure Description: For Standard Office Automation Software, the interoperability requirement is to provide users with the ability to exchange information using standard Gold Disk applications with other DON users not served by NMCI (IT-21, MCTN, and OCONUS), with DoD/Joint partners, and with major acquisition partners. The products and data produced on NMCI desktops must be managed to ensure that all current and future versions of the Gold Disk support the information exchange requirements of the Navy and Marine Corps mission, to include backward compatibility. Standard Office Automation Software interoperability will be measured in two ways: (1) proof of interoperability and (2) Help Desk Interoperability Trouble Tickets. -The proof of interoperability is to establish and maintain connection for the purpose of transferring standard office products between the test client and a set of representative test sites. This set is described in the Interoperability Test Plan. Gold Disk applications will be exercised by scripts operated from user agents installed at network devices located within NMCI and at external locations including IT-21/MCTN, DoD/Joint and commercial partner (major acquisition partners). The proof of interoperability is successful end-to-end testing between the test client and remote test site and is defined by the receipt of an anticipated script response. Failure equates to (2) two consecutive unsuccessful executions of a single application script from/to the same sites. Measurement will be performed by schedule and by event (to include introduction of a new application version); additional measurements will be performed as appropriate to ensure interoperability. - Interoperability will also be assessed by submission by users of Help Desk Interoperability Trouble Tickets. The definition of interoperability failure is exceeding the Government and ISF agreed upon Help desk reporting threshold value. The interoperability measurement must capture two-way functionality. Notification of the Government is required for Office Automation Software failure established by the DON; the timeliness of reporting is stipulated in the Level of Service metric.			
Who: Contractor		Frequency: Measured a minimum of once monthly for user agents; continuously for Help Desk. Reported monthly.	
Where: Measured from an NMCI user agent (located at an NMCI workstation) or an equivalent client configuration operated from a NOC test installation to test points identified in the NMCI Interoperability Test Plan, to include NMCI, DoD/Joint, and at least one Commercial (Major Acquisition Partner). Help Desk data will be captured from interoperability trouble reports.		How measured: 1) End User Incident Reports to Help Desk, and Remote Locked Down Workstation test results by running scripts. Collection and analysis granularity will be by test site for script-based tests; by organization, site, claimant/command for trouble ticket based reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within six (6) hours
Level of Service (2)			N/A
Level of Service (3)			Notification within three (3) hours
Performance Category 4: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			

Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: E-mail Services			**SLA: 3**
Service Description: Vendor provided services for sending, storing, processing, and receiving email and multimedia e-mail attachments.			
Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: E-mail availability is defined as the portion of time that vendor provided E-mail server is available or 'up' for sending and receiving E-mail. It is measured in terms of percentage of available time in a month. Formula is: (# of hours in month - E-mail outage time in hours) / number of hours in month. The outage time includes all scheduled and unscheduled E-mail service affecting outages. Exception is scheduled pre-agreed outage. Assumptions: does not address problems associated with network service; addresses only availability of the E-mail server; all E-mail servers are under the control and management of the contractor and located at the contract determined aggregation point (base, regional server farm, etc.).			
Who: Vendor		Frequency: Measured continuously, summarized daily, reported monthly	
Where: At the email server		How measured: Measured at email server. Excludes any failures relating to network and non-email server related hardware/components. Vendor monitors email server availability and reports % availability to basic/high end and mission critical users, on a monthly basis. Availability data will be audited by the Government or a designated third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.997	0.997	0.997
Performance Category 2: Problem Resolution			
Performance Measure Description: Elapsed time from the outage until the service is restored to normal operating performance. The measurement will be an aggregate and average by site of the time to restore service following Help Desk notification. The values indicated represent total time to restore from time of non-availability (includes response time).			
Who: Vendor		Frequency: Continuous monitoring, monthly reported	
Where: NMCI-wide		How measured: Based on Help Desk logs and enterprise management system	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		1 hour	1 hour
Level of Service (2)		1 hour	1 hour
Level of Service (3)		30 minutes	30 minutes
Performance Category 3: Performance of E-mail Transfer			
Performance Measure Description: Average time the vendor provided e-mail system keeps the message in their system (a) before depositing in the user's mailbox (on server) for incoming mail and (b) before delivering to the Internet or other NMCI domain for outgoing mail. Excludes the time the E-mail is queued into the user's local out-going message box (if that capability exists) before transmitting			

to the mail server.			
Who: Vendor		Frequency: Annual	
Where: Operations center		How measured: Vendor includes average daily 'time-in-spool' data in monthly reports to the Government. The data may be audited by a third party or Government.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	<= 5 minutes	<= 5 minutes	<= 5 minutes
Level of Service (2)	<= 5 minutes	<= 5 minutes	<= 5 minutes
Level of Service (3)	<= 5 minutes	<= 5 minutes	<= 5 minutes
Performance Category 4: Interoperability			
Performance Measure Description: For E-mail, the interoperability requirement is two-way exchange and effective use of E-mail with attachments within DON (to include IT-21, MCTN, and OCONUS) and two-way exchange between DON and other DoD/Joint partners and commercial partners (major acquisition partners). E-mail interoperability will be measured by multiple methods: (1) validation by user agents located within NMCI and at locations served by external networks with which NMCI must interface, and (2) by end user incident reporting at the desktop. -The validation of E-mail exchange will be performed by using smtp/other scripts, manual intervention, or other equivalent methodology. The measurement will include: sending and receiving email with no attachment, one attachment, and two attachments; attachments will be selected from the files developed using the Gold Disk standard automation products; and also include validation of signed E-mail, encrypted E-mail, and DMS client outside NMCI. The definition of E-mail interoperability failure is any two occurrences of unsuccessful transfer at any one site over six (6) consecutive tests (or 48 hours). Events at which E-mail will be measured: at installation and three (3) times daily; plus additional measurements as appropriate to ensure Joint Partner interoperability. - Interoperability will also be assessed by the submission by users of Help Desk Interoperability Trouble Tickets. The definition of E-mail interoperability failure is exceeding the Help Desk threshold reporting value of 10 E-mail interoperability trouble tickets referring to a single domain (e.g., Air Force) over a 12 hour period. Notification of the Government is required for E-mail interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.			
Who: Contractor		Frequency: Measured three (3) times daily for user agents; continuously for Help Desk. Reported monthly.	
Where: Measured from an NMCI user agent (located on an NMCI workstation) or an equivalent client configuration operated from a NOC test installation to test points identified in the NMCI Interoperability Test Plan, to include NMCI, DoD/Joint, and at least one Acquisition Partner. Help Desk data will be captured from interoperability trouble reports.		How measured: (1) End User Incident Reports to Help Desk, and Remote Locked Down Workstation test results by running scripts and exchanging test E-mail and attachments. Collection and analysis granularity will be by organization (domains) for script-based tests and by organization, site, claimant/command for trouble ticket based reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three

			(3) hours of failure.
Level of Service (2)			N/A
Level of Service (3)			Notification within three (3) hours of failure.
Performance Category 5: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Directory Services			**SLA: 4**
Service Description: Description: Vendor maintained global information services delivering distributed computing applications such as file, directory, security, messaging, Web, white pages, and object services, across the NMCI. Information services include storing, updating, and publishing (on-line and hard copy) directory information from multiple systems and formats including e-mail addresses, commercial and DSN telephone numbers, certificates, addresses, network resource policies, applications, network devices, and routing information as well as other NMCI determined data/resources. The global directory is envisioned to maintain information on millions of users and resources.			
Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat, Voice Seat, Video Seat			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: NMCI global information services are accessible at the service delivery points. Directory availability is defined for each directory service as the portion of time that vendor provided directory service is 'up' for making available directory information to the end user. It is measured in terms of percentage of available time in a month. Formula is: (# of hours in month - Directory outage time in hours) / # of hours in month. The outage time includes all scheduled and unscheduled Directory service affecting outages. Exception is scheduled pre-agreed outage. The computation addresses only availability of the Directory server and excludes problems associated with network service.			
Who: Vendor		Frequency: Measured continuously, summarized daily, reported monthly	
Where: At the Directory server		How measured: Measured at directory server. Excludes any failures relating to network and non-directory related hardware/ components. Vendor monitors directory server availability and reports % availability to basic/high end and mission critical users, on a monthly basis. Availability data will be audited by the Government or a designated third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.997	0.997	0.997
Performance Category 2: Responsiveness - network connected			
Performance Measure Description: Time it takes to search on-line directory information for LAN attached end-user within NMCI domain.			
Who: Vendor		Frequency: Monthly	
Where: NMCI wide		How measured: Sample testing of NMCI directory responsiveness.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	<=2 sec	<=2 sec	<=2 sec
Level of Service (2)	<=2 sec	<=2 sec	<=2 sec
Level of Service (3)	<=2 sec	<=2 sec	<=2 sec

Performance Category 3: Responsiveness - dial in			
Performance Measure Description: Time it takes to search on-line directory information for dial-in attached end-user within NMCI domain. The measurement assumes that the user is using at least a 56Kb/sec modem to dial in.			
Who: Vendor		Frequency: Monthly	
Where: NMCI wide		How measured: Sample testing of NMCI directory responsiveness.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	<=20 seconds	<=20 seconds	<=20 seconds
Level of Service (2)	<=20 seconds	<=20 seconds	<=20 seconds
Level of Service (3)	<=20 seconds	<=20 seconds	<=20 seconds
Performance Category 4: Timeliness of Directory Updates			
Performance Measure Description: Responsiveness and completeness of data in on-line directory resources add, change, or delete to individual directory information reflected within four (4) hours 99.9% of time. This excludes any updates that may not be under the control of the NMCI contractor. The measure is an aggregate and the average by site of the accuracy and completeness of data added, changed, or deleted to an individual's local on-line directory information. It also excludes the time required to replicate updates to every directory database internal or external to NMCI.			
Who: Vendor		Frequency: Monthly	
Where: Directory databases		How measured: Measured against actual performance by a sampling of requested directory updates that is statistically significant.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	within 4 hours, .999	within 4 hours, .999	within 4 hours, .999
Level of Service (2)	within 4 hours, .999	within 4 hours, .999	within 4 hours, .999
Level of Service (3)	within 4 hours, .999	within 4 hours, .999	within 4 hours, .999
Performance Category 5: Accuracy of Global On-line Directory			
Performance Measure Description: Maintain directory accuracy across NMCI infrastructure. This measure excludes any inaccuracies due to updates that may not be under the control of the contractor.			
Who: Government team		Frequency: Monthly	
Where: Enterprise level		How measured: Representative sampling provided by comparing a validated directory list to the NMCI Directory. It will include a cross-section of geographical, functional and organizational users and include 50% of users that have undergone directory changes over the last six months.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< .005 of users	< .001 of users	< .001 of users
Level of Service (2)	< .005 of users	< .001 of users	< .001 of users
Level of Service (3)	< .005 of users	< .001 of users	< .001 of users
Performance Category 6: Interoperability			
Performance Measure Description: For Directory Services, the interoperability requirement is to effectively exchange required directory attributes among DON IT infrastructures (NMCI, IT-21, MCTN, OCONUS) and with DoD. The DoD directory will import some subset of information from the NMCI directory, to include PKI certificates and required Defense Messaging System (DMS) attributes. A similar exchange is required with major acquisition partners. Directory interoperability will be measured by multiple methods: (1) validation by user agents located within NMCI and at locations			

served by networks external to NMCI (with which it must interface) and (2) measurement by end user incident reporting at the desktop.

- The validation of directory exchange may be performed by using X.500/LDAP scripts, or other equivalent methodology, and will include exchange of PKI certificates. The definition of Directory interoperability failure is any two occurrences of unsuccessful transfer at any one site over six (6) consecutive tests (or 48 hours). The Directory interoperability will be measured three (3) times daily; additional measurements as appropriate to ensure Joint Partner interoperability.

- Interoperability will also be assessed by the submission by users of Help Desk Interoperability Trouble Tickets. The definition of Directory interoperability failure is exceeding the DON and ISF determined Help Desk reporting threshold value for Directory interoperability trouble tickets over a 12 hour period.

Notification of the Government is required for Directory interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor	Frequency: Measured three (3) times daily for user agents; continuous for Help Desk. Reported monthly.
Where: Measured from an NMCI user agent (located on an NMCI workstation) or an equivalent client configuration operated from a NOC test installation to test points identified in the NMCI Interoperability Test Plan, to include NMCI and DoD/Joint. Help Desk data will be captured from interoperability trouble reports.	How measured: (1) End User Incident Reports to Help Desk, and (2) Remote Locked Down Workstation test results by running scripts, to include related PKI certificates. Collection and analysis granularity will be by organization (domains) for script-based tests and by organization, site, claimant/command for trouble ticket based reports.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within six (6) hours of failure.
Level of Service (2)			N/A
Level of Service (3)			Notification within three (3) hours of failure.

Performance Category 7: Customer Satisfaction

Performance Measure Description: Level of customer satisfaction.

Who: Contractor	Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.
Where: NMCI Customers using service	How measured: Customer survey, random sampling of NMCI customers using this service.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: File Shared Services			**SLA: 5**
Service Description: Vendor provided service that will allow the user to store and retrieve files on shared, controlled access storage media. This includes access controls, and back up and recovery.			
Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability to required users			
Performance Measure Description: Availability to file share services for all NMCI account holders. The computation addresses only availability of the File Share server and excludes problems associated with network service. The measurement is an aggregate and average by site.			
Who: Contractor		Frequency: Measured continuously, summarized daily, reported monthly	
Where: At the share file server.		How measured: Measured at file server. Excludes any failures relating to network and non-fileshare related hardware/components. Vendor monitors file share server availability and reports % availability to basic/high end and mission critical users, on a monthly basis. Availability data will be audited by the Government or a designated third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.997	0.997	0.997
Performance Category 2: File share data integrity			
Performance Measure Description: Number of unrecoverable data loss incidents per month to user ratio. The measurement is an aggregate and the average by site of the number of unrecoverable data loss incidents per month (as reported at the Help Desk) compared to the number of users. It assumes that the data is resident on the file server and has been saved at least once by the user.			
Who: Vendor		Frequency: Monthly as reported to HD	
Where: File server		How measured: Analysis of Help Desk actions to restore file share data inaccuracies	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.0005	0.0005	0.0005
Level of Service (2)	0.0005	0.0005	0.0005
Level of Service (3)	0.0003	0.0003	0.0003
Performance Category 3: Time to recover lost files			
Performance Measure Description: Time to recover lost file begins with initial notification of help desk and runs until completion of file restoration. The measurement is an aggregate and the average time by site to recover lost files from all NMCI shared file servers, as reported at the Help Desk. It assumes that lost files are recoverable, e.g., if a user deletes a file before it is saved, it may be unrecoverable.			
Who: Vendor		Frequency: Monthly	
Where: File server		How measured: Analysis of Help Desk trouble calls relating to file share data inaccuracies. B values are time to recover and percentage of time that will be met.	

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	1 Day .95	1 Day .95	1 Day .95
Level of Service (2)	1 Day .95	1 Day .95	1 Day .95
Level of Service (3)	4 hours .98	4 hours .98	4 hours .98
Performance Category 4: Shared file performance - network			
Performance Measure Description: Time to retrieve or post 1 MB file for LAN attached NMCI end-user from a supporting shared file server, located locally or at an aggregated server farm. This level of performance applies at all Navy and Marine Corps sites. The measurement is an aggregate and the average time by site.			
Who: Contractor		Frequency: Monthly	
Where: End user workstation		How measured: Periodic testing from representative NMCI workstations. Measurement will be based on tests run 10 times a month, during business critical hours, with an average time to transfer a 1 MB file is not greater than 2 seconds.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	2 Seconds	2 Seconds	2 Seconds
Level of Service (2)	2 Seconds	2 Seconds	2 Seconds
Level of Service (3)	2 Seconds	2 Seconds	2 Seconds
Performance Category 5: Shared file performance - dial in			
Performance Measure Description: Time to retrieve or post 100 KB file for dial in NMCI end-user. The measurement is an aggregate and average time by site to retrieve or post a 100 KB file for dial in NMCI users. The measurement excludes the time to acquire connection via dial-in. It assumes that the user is authorized to dial into a server, and the server is configured to allow the user to retrieve and post a file. It assumes that the user can connect to the supporting RAS using at least a 56 Kb/sec modem to dial in. The measure is structured to factor out the effects of the dial in line.			
Who: Contractor		Frequency: Monthly	
Where: End user dial in workstation		How measured: Periodic testing from representative NMCI dial in located aboard NMCI site. Measurement will be based on tests run 10 times a month, with an average time to retrieve a 100 KB file by a dial in user is not more than 30 seconds.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	30 Seconds	30 Seconds	30 Seconds
Level of Service (2)	30 Seconds	30 Seconds	30 Seconds
Level of Service (3)	30 Seconds	30 Seconds	30 Seconds
Performance Category 6: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Web Access Services			**SLA: 6**
Service Description: Vendor provided ability and features that allow end user to access in-house and external web content.			
Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: Web server availability is defined as the portion of time that vendor provided web servers are available or 'up' for customer access. It is measured in terms of percentage of available time in a month. Formula is: (# of hours in Month - Web server outage time in hours) / number of hours in Month. The outage time includes all unscheduled web server outages. The measurement is an aggregate and average availability by site of all contractor controlled and managed web servers as reported at the Help Desk. The computation addresses only availability of the Web server and excludes problems associated with network service.			
Who: Vendor		Frequency: Measured continuously, summarized daily, reported monthly	
Where: At the web server		How measured: Measured at the web server. Vendor monitors web server availability and reports % availability by individual server. Availability data will be audited by the Government or a designated third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.997	0.997	0.997
Performance Category 2: Performance of NMCI Web Access			
Performance Measure Description: Average time to access NMCI hosted web site from NMCI workstation. Focus of this measure is to maintain required level of performance as user requirements change. The measure assumes that the NMCI workstation is LAN attached, The measurement is an aggregate and the average time by site to access NMCI hosted web site home page from a NMCI workstation. It excludes the time for starting up the user's desktop web browser.			
Who: Contractor		Frequency: Monthly	
Where: End user workstation		How measured: Continuous testing of representative NMCI automatic agents. Measured during normal working hours for Basic (1) and Enhanced (2), and 24 X 7 for Mission Critical (3).	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	<= 15 seconds	<= 15 seconds	<= 15 seconds
Level of Service (2)	<= 10 seconds	<= 10 seconds	<= 10 seconds
Level of Service (3)	<= 5 seconds	<= 5 seconds	<= 5 seconds
Performance Category 3: Interoperability			
Performance Measure Description: For Web Access Services, the interoperability requirement is to provide access to and full capability of web resources within DON (to include IT-21 and MCTN) and two-way exchange between DON and other DoD/Joint users/sites and commercial partners/sites. Web Access interoperability will be measured by multiple methods: (1) by user agents located within NMCI and at locations served by external networks with which NMCI must interface and (2) by end user incident reporting at the desktop, and.			

-The validation of Web Access interoperability will be performed by using http/other scripts, manual intervention, or other equivalent methodology. The measurement will include NMCI site(s), Joint site(s), and an Internet test site; it will include both non-secure and secure configured sites as well as multiple security settings. The definition of Web Access interoperability failure is any two occurrences of unsuccessful transfer at any one site over six (6) consecutive tests (or 48 hours). Events at which Web Access will be measured: at installation and three (3) times daily; additional measurements as appropriate to ensure Joint Partner interoperability.

- Interoperability measurement will also be performed by the submission by users of Help Desk Interoperability Trouble Tickets. The definition of Web Access interoperability failure is exceeding Help desk reporting of threshold value of 10 Web Access interoperability trouble tickets referring to a single web site over a 12 hour period.

Notification of the Government is required for Web Access interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor	Frequency: Measured three (3) times daily for user agents; continuous for Help Desk. Reported monthly.
Where: Measured from an NMCI user browser (located on an NMCI workstation) or an equivalent client configuration operated from a NOC test installation to test points identified in the NMCI Interoperability Test Plan, to include NMCI, DoD/Joint, and at least one Internet test site. Help Desk data will be captured from interoperability trouble reports.	How measured: (1) End User Incident Reports to Help Desk, and Remote Locked Down Workstation test results by running scripts and exchanging test http/other scripts. Scripts will represent the oldest browser version supported by NMCI, but newer versions may be supported. Collection and analysis granularity will be by organization, site, claimant/command.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within six (6) hours
Level of Service (2)			N/A
Level of Service (3)			Notification within three (3) hours

Performance Category 4: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Newsgroup Services **SLA: 7**

Service Description: Vendor provided services for posting, reading, and processing user determined public and private newsgroups.

Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat

Levels of Services: 3: (Basic, High End, Mission Critical)

Performance Category 1: Availability

Performance Measure Description: Availability to newsgroup services for all NMCI account holders. . The computation addresses only availability of the Newsgroup server and excludes problems associated with network service. The measurement is an aggregate and average availability by site of the newsgroup servers.

Who: Vendor	Frequency: Measured continuously, summarized daily, reported monthly
Where: End user	How measured: Measured at news group server. Excludes any failures relating to network and non-newsgroup related hardware/components. Vendor monitors newsgroup server availability and reports % availability to basic/high end and mission critical users, on a monthly basis. Availability data will be audited by the Government or a designated third party.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.997	0.997	0.997

Performance Category 2: Interoperability

Performance Measure Description: For Newsgroup Services, the interoperability requirement is to interface with and exchange data with both DON and external systems. DON newsgroup sources include both IT-21 and MCTN. The external sources include other Services, DoD/Joint, and other U.S Government Agencies. Newsgroup services are primarily USENET services using Network News Transport Protocol (NNTP) as defined by RFC 977. Newsgroup interoperability will be measured by multiple methods: (1) by user agents located within NMCI and at locations served by external networks with which NMCI must interface and (2) by end user incident reporting at the desktop.

- The validation of Newsgroup interactions may be performed by using NNTP/other scripts, manual intervention, or other equivalent methodology. The measurement will include: interaction with a Navy and/or Marine Corps system, a DoD/Joint system located outside NMCI, and a commercial system, all of which are NNTP based. Events at which Newsgroup interoperability will be measured: at installation, three (3) times daily; additional measurements as appropriate to ensure Joint Partner interoperability. The definition of Newsgroup interoperability failure is any two occurrences of unsuccessful transfer at any one site over six (6) consecutive tests (or 48 hours).

- Interoperability measurement will also be performed by the submission by users of Help Desk Interoperability Trouble Tickets. The definition of Newsgroup interoperability failure is exceeding Help Desk reporting of threshold value of 10 Newsgroup Access interoperability trouble tickets referring to a single Newsgroup service over a 12 hour period.

Notification of the Government is required for Newsgroup interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.			
Who: Contractor		Frequency: Measured one (1) time daily for user agents; continuous for Help Desk. Reported monthly.	
Where: Measured from an NMCI user work station or an equivalent client configuration operated from a NOC test installation to test points identified in the NMCI Interoperability Test Plan, to include NMCI, DoD/Joint, and Commercial (at least one representative test site). Help Desk data will be captured from interoperability trouble reports.		How measured: (1) End User Incident Reports to Help Desk, and Remote Locked Down Workstation test results by running scripts and exchanging test nntp/other scripts. Scripts will represent the oldest browser version supported by NMCI, but newer versions may be supported. Collection and analysis granularity will be by organization, site, claimant/command.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within 1 working day
Level of Service (2)			N/A
Level of Service (3)			Notification within three (3) hours
Performance Category 3: Performance			
Performance Measure Description: "Time-of-transfer" is defined as the total time from the end-user's command to transmit an article until that article is posted in a newsgroup service; and as the total time from the server's receipt of a user request for displaying an article until that article is received at the user's workstation. "Time-of-transfer success" is defined as the percentage of successful vs. total transfer trials. The measurement is an aggregate and average by site of the time-of-transfers for a 256 KB news article from all contractor controlled and managed newsgroup servers at the base level. The category assumes an NMCI LAN attached workstation, and that transfers are to and from NMCI newsgroup servers at the user's base.			
Who: Vendor		Frequency: Monthly	
Where: NMCI NOC		How measured: A time-of-transfer success is achieved whenever the time-of-transfer for a 256-KB news article is 2 seconds or less. Vendor shall assess time-of-transfer through a monthly testing process producing statistically valid results per site at a 90% confidence level.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.9	0.9	0.9
Level of Service (2)	0.95	0.95	0.95
Level of Service (3)	0.99	0.99	0.99

Performance Category 5: Customer Satisfaction			
Performance Measure Description: Newsgroup services satisfaction shall be incorporated into the overall NMCI customer satisfaction measurement program as a separately queried, analyzed, and reported capability.			
Who: Contractor		Frequency: Quarterly	
Where: NMCI Customers using service		How measured: The vendor will include an optional response item for "Newsgroup Services" in the standard NMCI customer satisfaction measurement instrument. Average satisfaction requirements shall be commensurate with NMCI as a whole.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Print Services			**SLA: 9**
Service Description: Vendor supplied ability for end user to produce (1) black & white (2) color hard copies of electronic documents and transparencies, expressed as a range for each printer.			
Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided)			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: Printer up time where end user is capable of performing print operation. The formula for calculating printer up time will weigh the number of end users affected by printer availability, and a distinction will be made for basic/high end and mission users. The outage time includes all unscheduled printer outages. Exception is scheduled pre-agreed outage. The measurement is an aggregate and average availability by site of NMCI printers from valid trouble tickets at the Help Desk. Printers are assumed to be available unless there is a trouble ticket at the Help Desk. The computation assumes that printer warm-up time is up time, and that any powered down printer is by pre-agreed scheduled outage, unless due to a malfunction. Printer maintenance, to include replacement of toner cartridges, will be performed by the contractor; the provisioning of consumables, to include toner cartridges, will be performed by the Government. (Print cartridges and ink drums are considered pre-agreed scheduled outages).			
Who: Vendor		Frequency: Measured continuously, summarized daily, reported monthly	
Where: Printer		How measured: Analysis of Help Desk reports of printer failures	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.997	0.997	0.997
Performance Category 2: Accessibility			
Performance Measure Description: Accessible supporting printer is located within 50 feet of all supported workstations. Assumptions: all supported workstations must be within the same physical plane limitation of the requirement and not separated by ceilings, floors, and true walls; must be executable without causing a safety hazard situation or security compromise.			
Who: Vendor		Frequency: Acceptance of installations	
Where: To each NMCI workstation		How measured: Distance determined from supported workstations to supporting printer.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	Yes	Yes	Yes
Level of Service (2)	Yes	Yes	Yes
Level of Service (3)	Yes	Yes	Yes
Performance Category 3: Average Density			
Performance Measure Description: Average number of users per NMCI printer. Individual occurrences of printer to end-users will not exceed 25. Assumptions: all supported workstations must be within the same physical plane limitation of the requirement and not separated by ceilings, floors, and true walls; must be executable without causing a safety hazard situation or security compromise.			
Who: Vendor		Frequency: Acceptance of installations	

Where: to each NMCI workstation		How measured: Actual users per supported printer.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	Yes	Yes	Yes
Level of Service (2)	Yes	Yes	Yes
Level of Service (3)	Yes	Yes	Yes
Performance Category 4: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: NMCI Intranet Performance			**SLA: 10**
Service Description: An external to the base combined service level for networking of voice, video or data (as appropriate) as performed by the NMCI Intranet. Performance metrics in this SLA apply to all NMCI sites regardless of user population, except where noted.			
Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: Availability of connectivity across the NMCI. Availability of the connectivity is measured end-to-end, from the NMCI base, post, camp, or station point of presence to NMCI base, post, camp or station point of presence, and includes all intervening infrastructure. The measurement is an aggregate product of availabilities of the area networking devices (routers/ switches) through which the NMCI traffic must transit.			
Who: Vendor		Frequency: Measured periodically, summarized hourly, reported daily	
Where: Access Point of Entry for NMCI Intranet		How measured: Measured from BAN portal across the WAN/MAN to BAN portal. Periodic measurements using industry accepted measurement protocol between Naval concentration areas, and 5 percent of the selected outlying sites. Calculation: Number of hours of service availability divided by the number of hours in week.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.998	0.998	0.998
Level of Service (2)	0.998	0.998	0.998
Level of Service (3)	0.998	0.998	0.998
Performance Category 2: Latency and Packet Loss			
Performance Measure Description: Packet latency across the Intranet to other NMCI sites, other DoD sites, and commercial sites. The measurement is an aggregate and average of network latency by site across the Intranet to other NMCI sites. The measurement will be provided for every WAN/MAN solution that provides service to NMCI, broken down by site and by WAN/MAN type for both classified and unclassified networks. Acceptable management protocol(s) will be initiated from the NOC. Attempted measurements stopped for reasons of security (firewalls) will not be computed in this measurement. Latency reporting will include average, range, and distribution. First metric is latency; second metric is packet loss. Packet loss will be measured and reported if a packet technology solution is used.			
Who: Vendor		Frequency: Measured every 5 minutes, reported monthly	
Where: SDP		How measured: Acceptable measurement protocol measured round trip time to multiple sites throughout the day. Value performance range is dependent on number of hops. Packet Loss determined as part of measured returns.	
	B Value	Pre-Negotiation	Contract SLA

Level of Service (1)	70 - 100 ms *	70 - 100 ms * / < 1.0 %	70 - 100 ms * / < 1.0 %
Level of Service (2)	70 - 100 ms *	70 - 100 ms * / < 1.0 %	70 - 100 ms * / < 1.0 %
Level of Service (3)	70 - 100 ms *	70 - 100 ms * / < 1.0 %	70 - 100 ms * / < 1.0 %

COMMENT: * B value ranges for latency apply to CONUS; for latency from Hawaii to east coast, values will <= 140 ms. These values are applicable to data; latency for voice circuits should not exceed 120 ms to avoid voice clarity degradation. The packet loss values shown are at the high end of acceptable values. These metrics apply to headquarters, bases, posts, camps, and stations; smaller sites will be addressed on a class (e.g., recruiting stations) or case-by-case basis.

Performance Category 3: Interoperability

Performance Measure Description: For NMCI Intranet Services, the interoperability requirement is focused on the segments among NMCI bases. Joint/DoD and commercial interoperability is addressed in SLAs 11 (NIPRNET), SLA 12 (Internet), and SLA 35 (SIPRNET). Non-DON activities located on DON bases that may be supported by NMCI are addressed in SLA 25 (BAN/LAN). NMCI interoperability with IT-21, MCTN, and selected major commercial partners (Major Acquisition Partners) (with dedicated transport) is addressed in SLA 27 (External Networks). The measure of Intranet interoperability is particularly important during the initial NMCI lay down where DON is operating with two configurations (legacy and NMCI), and between Navy and Marine Corps bases that may potentially be provisioned by two different WAN providers -- DISA and in some cases vBNS+. Intranet interoperability will be measured by user agents located within NMCI. The user agents will employ scripts (e.g.: IP, Windows, DOS) to demonstrate OSI layer 1-4 interoperability. Intranet interoperability is defined here as the ability to establish and maintain network connectivity and exchange useful and effective information between any two NMCI clients regardless of WAN provider. Intranet interoperability testing will consist of two basic tests: (1) proof of interoperability and (2) performance testing.

-The proof of interoperability is to establish and maintain connection for the purpose of transferring information between the test clients. This will be demonstrated by successful execution of IP based scripts, or equivalent testing. The definition of a failure is two consecutive unsuccessful executions of the test script between test clients.

-The performance testing is end-to-end testing between clients, as measured by latency between the two clients. The definition of a failure is exceeding the Government and ISF agreed upon baseline values for latency.

These measures will be performed upon installation and three (3) times daily; additional measurements as appropriate to ensure interoperability. Notification of the Government is required for Intranet interoperability failure as established by the DON (Navy CTF and MITNOC); timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor	Frequency: Measured three (3) times daily for user agents. Reported monthly.
Where: Measured from an NMCI user agent located at a DISN supported NMCI base and a client at a vBNS+ supported NMCI base. Test points will be identified in the NMCI Interoperability Test Plan.	How measured: Remote agent locked down workstation test conducted to verify successful exchange of IP based scripts. Collection and analysis granularity will be by test sites.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three (3) hours of failure
Level of Service (2)			N/A
Level of Service (3)			Notification within one

			(1) hour of failure
Performance Category 4: Problem Resolution			
Performance Measure Description: Elapsed time from the outage until the service is restored to normal operating performance. The measurement will be an aggregate and average by site of the time to restore service following Help Desk notification. The values indicated represent total time to restore from time of non-availability (includes response time). Mission critical users will be physically dual homed and, in the event of an outage, will only lose their redundancy. The problem resolution will be to restore redundancy. Failover to a device, within a device or the use of alternative paths having redundancy capabilities will satisfy the time to restore requirement. Also specifies response time to begin repair.			
Who: Vendor		Frequency: Continuous monitoring, monthly reported	
Where: NMCI-wide		How measured: Event logs, first metric is response time, and second value is time to restore. In case of LOS (3) values, the second number is time to restore redundancy.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	30 minutes / 3hours	30 minutes / 3hours	30 minutes / 3hours
Level of Service (2)	15 minutes / 1 hour	15 minutes / 1 hour	15 minutes / 1 hour
Level of Service (3)	3 minutes / 30 minutes	3 minutes / 30 minutes	3 minutes / 30 minutes
Performance Category 5: Customer Satisfaction			
Performance Measure Description: User satisfaction of latency of network apps, interoperability (reachability) to DON and DoD sites			
Who: Vendor		Frequency: Quarterly	
Where: NMCI-wide		How measured: Based on customer satisfaction surveys.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: NIPRNET Access			**SLA: 11**
Service Description: A point of entry for the voice, video or data device (as appropriate) used by the end user into the NIPRNET.			
Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat, Voice seat, and seats with classified option.			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: Availability of connectivity to NIPRNET portal. Measured from the NMCI end user to the last NMCI controlled access point to the NIPRNET and includes intervening infrastructure. Excludes any outages beyond the control of NMCI. These availability values are generally aggregate and average availability of the NIPRNET by site, but for Mission Critical users, the Mission Critical availability values will be measured, reported, and adhered to separately for each activity or organization.			
Who: Vendor		Frequency: Measured continuously, summarized hourly, reported daily	
Where: Access Point of Entry for NIPRNET		How measured: Measurements from NMCI end user to NMCI access point, based on help desk trouble tickets reported by region/base/ organization. Calculation: Number of hours of service availability divided by the total number of hours.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.980	.995	.995
Level of Service (2)	0.980	.995	.995
Level of Service (3)	0.996	.998	.998
Performance Category 2: Latency and Packet Loss			
Performance Measure Description: Latency and packet loss from the NMCI end user to the NIPRNET access point last controlled by the NMCI provider. Measurement applies to an end user with a fixed workstation operated on a base network. Intent is to ensure that the connectivity to the NIPRNET supports satisfactory performance. The latency measurement is an aggregate and average of packet latency across the contractor provided data transport. Attempted measurements includes measurement across the switching, routing, and security mechanisms.			
Who: Vendor		Frequency: Continuously monitored	
Where: NMCI-wide		How measured: Latency and Packet Loss - acceptable measurement protocol (depending on technology) measured one way from NMCI end user to NIPRNET access point. Packet Loss determined as part of measured returns.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	80 ms / 10%	< 30 ms / <1.0%	< 30 ms / <1.0%
Level of Service (1)	80 ms / 10%	< 30 ms / <1.0%	< 30 ms / <1.0%
Level of Service (3)	80 ms / 10%	< 30 ms / <1.0%	< 30 ms / <1.0%

Performance Category 3: Interoperability			
Performance Measure Description: For NIPRNET Access, the interoperability requirement is focused on the segments between DON bases and Joint/DoD bases. The requirement is bi-directional. The measure of NIPRNET interoperability is particularly important because it represents the data transport between Navy and Marine Corps and the other Services, DoD/Joint, and other Agencies. Interoperability will be measured by user agents that will employ scripts (e.g.: IP, Windows, DOS) to demonstrate OSI layer 1-4 interoperability. NIPRNET interoperability is defined here as the ability to establish and maintain network connectivity and exchange useful and effective information from any NMCI client to any DoD/Joint partner located outside of NMCI accessed by NIPRNET. NIPRNET interoperability testing will consist of two basic tests: (1) proof of interoperability and (2) performance testing. -The proof of interoperability is to establish and maintain connection for the purpose of transferring information between the test clients. This will be demonstrated by successful execution of IP based script, or equivalent testing. The definition of a failure is two consecutive unsuccessful executions of the test script between test clients. -The performance testing is end-to-end testing between clients, as measured by latency between the two clients. The definition of a failure is exceeding the Government and ISF agreed upon baseline values for latency. These measures will be performed upon installation and three (3) times daily; additional measurements as appropriate to ensure interoperability. Coordination for establishment of Joint/DoD site constellation is the responsibility of the Government. The user agents will employ IP based scripts to demonstrate OSI layer 1-4 interoperability. Notification of the Government is required for NIPRNET interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.			
Who: Contractor		Frequency: Measured three (3) times daily for user agents. Reported monthly.	
Where: Measured from an NMCI user agent operated from a NOC test installation. Test points will be identified in the NMCI Interoperability Test Plan but will include both NMCI and DoD/Joint sites.		How measured: Remote agent locked down workstation test conducted to verify successful exchange of IP based scripts. Collection and analysis granularity will be by test sites.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three (3) hours of failure
Level of Service (2)			N/A
Level of Service (3)			Notification within one (1) hour of failure
Performance Category 4: Customer Satisfaction			
Performance Measure Description: User satisfaction of latency of network apps, interoperability (reachability) to DON and DoD sites			
Who: Vendor		Frequency: Quarterly	
Where: NMCI-wide		How measured: Based on customer satisfaction surveys.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85	0.85 satisfactory rating	0.85 satisfactory rating

Level of Service (3)	0.90	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Internet Access **SLA: 12**

Service Description: A point of entry for the voice, video or data device (as appropriate) used by the end user into the Internet.

Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat

Levels of Services: 3: (Basic, High End, Mission Critical)

Performance Category 1: Availability

Performance Measure Description: Availability of connectivity to the Internet. Measured from the NMCI end user to NMCI Internet Demarcation point at the NOC. Excludes any outages beyond the control of NMCI. This measure is an aggregate and average of the availability by site of the access points of entry for the Internet. It does not include the availability of NMCI network services. The contractor is not responsible for problems attributable to the Internet.

Who: Vendor	Frequency: Measured continuously, summarized hourly, reported daily
Where: Access Point of Entry for Internet	How measured: Measurements from NMCI end user to Internet access point, based on help desk trouble tickets reported by region/base/ organization. Calculation: Number of hours of service availability divided by the total number of hours.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.980	0.980	0.980
Level of Service (2)	0.980	0.980	0.980
Level of Service (3)	0.996	0.996	0.996

Performance Category 2: Interoperability

Performance Measure Description: For Internet Access, the interoperability requirement is focused on the segments between DON bases and major acquisition partner sites, as accessed via the DISN. The requirement is bi-directional. The measure of Internet interoperability is important because it represents the single data transport to the commercial E-mail, World-wide Web, and business entities. (The exceptions are commercial/Major Acquisition partners connected via dedicated lines and selected science and engineering communities). Interoperability will be measured by user agents that will employ scripts (e.g.: IP, Windows, DOS) to demonstrate OSI layer 1-4 interoperability. Internet interoperability is defined here as the ability to establish and maintain network connectivity and exchange useful and effective information from any NMCI client to any commercial partner located outside of NMCI accessed by Internet. Internet interoperability testing will consist of two basic tests: (1) proof of interoperability and (2) performance testing.

-The proof of interoperability is to establish and maintain connection for the purpose of transferring information between the test clients. This will be demonstrated by successful execution of IP based scripts, or equivalent testing. The definition of a failure is two scheduled consecutive unsuccessful executions of the test script between test clients.

-The performance testing is end-to-end testing between clients, as measured by latency between the two clients. The definition of a failure is exceeding the Government and ISF agreed upon baseline values for latency.

These measures will be performed upon installation and three (3) times daily; additional

measurements as appropriate to ensure interoperability. Coordination for establishment of major acquisition partner is the responsibility of the Government. The user agents will employ IP based scripts to demonstrate OSI layer 1-4 interoperability. Notification of the Government is required for Internet interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.			
Who: Contractor		Frequency: Measured three (3) times daily for user agents. Reported monthly.	
Where: Measured at a NMCI workstation or an equivalent client configuration operated from a NOC test installation. Test points will be identified in the NMCI Interoperability Test Plan but will include both NMCI and commercial site.		How measured: Remote agent locked down workstation test conducted to verify successful exchange of IP based scripts. Collection and analysis granularity will be by test site.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three (3) hours of failure
Level of Service (2)			N/A
Level of Service (3)			N/A
Performance Category 3: Customer Satisfaction			
Performance Measure Description: User satisfaction of latency of network apps, interoperability (reachability) to DON and DoD sites			
Who: Vendor		Frequency: Quarterly	
Where: NMCI-wide		How measured: Based on customer satisfaction surveys.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Mainframe Services Access **SLA: 13**

Service Description: Vendor provided access to mainframe data and applications. Includes but is not limited to 3270 and VT100 terminal emulation.

Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat

Levels of Services: 3: (Basic, High End, Mission Critical)

Performance Category 1: Availability

Performance Measure Description: Availability of access to required mainframe applications and data. Measured from the NMCI end user to the last NMCI controlled access point to the mainframe. The metric covers a wide range of protocols and methodologies required to provide end user mainframe access. This measure represents availability of applications and infrastructure under the contractor's control required to provide end user mainframe access. The mainframe access is assumed to be available unless there is a trouble ticket at the Help Desk.

Who: Contractor	Frequency: Measured continuously, summarized daily, reported monthly
Where: DON-wide	How measured: Measured from end user to the NMCI controlled access point. This shall be measured by service downtime reports, latency reports, reports of network degradation, and user feedback surveys.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.997	0.997	0.997

Performance Category 2: Interoperability

Performance Measure Description: For Mainframe Services Access, the interoperability requirement is to provide NMCI users with access and functionality to these mainframe services located within DON and at other DoD/Joint sites, and to ensure that other DoD/Joint users can access these services where hosted within the DON. Mainframe Access interoperability will be measured by multiple methods: (1) validation by user agents located within NMCI and at locations served by external networks with which NMCI must interface, and (2) by end user incident reporting at the desktop

- The proof of interoperability is to establish and maintain connection for the purpose of transferring information between the NMCI client and the designated mainframe. This will be demonstrated by successful execution of SNA or DNA based script, or equivalent testing. The definition of a failure is two consecutive unsuccessful executions of the test script between test clients. This measure will be performed upon installation and a minimum of one time daily; plus additional measurements as appropriate to ensure interoperability.

- Interoperability will also be assessed by the submission by users of Help Desk Interoperability Trouble Tickets. The definition of Mainframe interoperability failure is exceeding the DON and ISF determined Help Desk reporting threshold value for Mainframe Services interoperability trouble tickets over a 12 hour period.

Coordination for establishment of mainframe log-on permissions is the responsibility of the Government. Notification of the Government for mainframe interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor		Frequency: Measured a minimum of one (1) time daily, continuous for Help Desk. Reported monthly.	
Where: Measured from a NMCI user agent operated from a NOC test installation to a designated Joint/DoD mainframe. Test points will be identified in the NMCI Interoperability Test Plan but will include NMCI and DoD/Joint. Help Desk data will be captured from interoperability trouble reports.		How measured: 1) End User Incident Reports to Help Desk, and (2) by running scripts from a NOC user agent using an SNA or DNA based script to verify successful log-on. Collection and analysis granularity will be by test site, and by organization, site, claimant/command for trouble ticket based reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three (3) hours of failure
Level of Service (2)			N/A
Level of Service (3)			Notification within three (3) hours of failure
Performance Category 3: Customer Satisfaction			
Performance Measure Description: Performance to support mission requirements (end-user satisfaction level)			
Who: Vendor		Frequency: Baseline survey followed by annual surveys	
Where: DON-wide		How measured: Customer Survey	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Desktop Access to Government Applications **SLA: 14**

Service Description: Vendor provided desktop access to Government systems and applications (server and workstation based), regardless of how those systems and applications are managed and maintained. This SLA applies to the following: legacy applications that are maintained by the Government and supported by the contractor as a basic service during initial transition (SOO 3.1.12); emerging systems and applications fielded after initial NMCI baseline is established and connected under CLIN 27; and those systems and applications that later undergo greater integration under NMCI management/operation via CLIN 29.

Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat

Levels of Services: 3: (Basic, High End, Mission Critical)

Performance Category 1: Availability

Performance Measure Description: The vendor's ability to provide availability of the full functionality of the system/application at the end user's desktop. This means that the end user is made available all of the functionality that was designed into the system/application. Exclusions: malfunctions in the workstation based application software, and malfunctions in the server hardware/software, or application software (for CLIN 27 connected servers). Availability is measured from the NMCI end user to the network interface card of the legacy server; it does not include the availability of the legacy server. The measurement is an aggregate product by site and includes the availabilities of the intervening NMCI networks/components. Vendor shall provide monthly reports showing downtime, degradation of service and user feedback statistics. The application availability is assumed to be available unless there is a trouble ticket at the Help Desk.

Who: Vendor	Frequency: Monthly reports on the system/application availability
Where: At the end user workstation.	How measured: Analysis of Help Desk data. Reflects percent availability of selected Government applications, as determined by the Government.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.997	0.997	0.997

Performance Category 2: Interoperability

Performance Measure Description: For Access to Government Applications, the interoperability requirement is to provide "users" with access without any change in application "behavior" to NMCI connected server based applications required to support mission performance. These "users" include NMCI, IT-21, MCTN, DoD/Joint, and commercial partners (major acquisition partners). There is also the requirement to obtain access and capability to applications hosted outside DON, in the DMZ, at DoD/Joint and commercial partners sites.

Applications access interoperability measures will include the use of simulated business transactions. The measurement will capture two-way (from NMCI out and from outside NMCI into NMCI) capability. Interoperability will be measured in multiple ways: (1) proof of interoperability, (2) performance testing, and (3) Help Desk Interoperability Trouble Tickets.

-The proof of interoperability is to establish and maintain connection for the purpose of transferring information between the test client and a "set" of representative applications. This "set" is described in the Interoperability Test Plan, and consists of representative applications selected from application families which grouped based upon their similar characteristics – application technical architecture, protocols, systems software, and host location. Each selected representative application will be exercised by scripts that represent the business operations of that application. Proof of interoperability is end-to-end testing between the test client and remote application and is defined by receiving an anticipated script response. Failure equates to (2) two consecutive unsuccessful executions of a single application script. This measure will be performed upon installation and three (3) times daily; additional measurements as appropriate to ensure interoperability.

- Performance testing is end-to-end testing between the client and the application host. Performance is measured by round trip transaction latency. The definition of failure is exceeding the Government and ISF agreed upon baseline values for round trip transaction latency. This measure will be performed upon installation and three (3) times daily; additional measurements as appropriate to ensure interoperability.

- Optional performance testing: the above performance testing does not provide the ability to isolate segments of the end-to-end user to application chain of networks and components here deemed technically feasible and operationally desirable, additional performance monitoring may be put in place to isolate client, network, and server performance. This may be employed in exceptional cases required for a specific application or network.

- Interoperability measurement will also be performed by submission by users of Help Desk Interoperability Trouble Tickets. The definition of interoperability failure is exceeding the Government and ISF agreed upon Help Desk reporting threshold value.

Applications that are scripted will be rotated on a periodic basis per Government mission requirements. Measurement will be performed by schedule and by event, to include introduction of new application. Reporting of threshold events and required escalation is performed according to ISF procedures. Coordination for establishment of Joint/DoD site constellation is the responsibility of the Government. Notification of the Government is required for interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor	Frequency: Measured three (3) times daily for user agents; continuous for Help Desk. Reported monthly.
Where: Measured from an NMCI user workstation or an equivalent client configuration operated from a NOC test installation to a set of selected representative applications. Test points will be identified in the NMCI Interoperability Test Plan but will include NMCI, DoD/Joint, and Commercial. Help Desk data will be captured from interoperability trouble reports.	How measured: (1) Application scripts via remote agent and (2) End User Incident Reports to Interoperability Help Desk. Collection and analysis granularity will be by test site for script-based tests and by activity, claimant/command and enterprise for trouble ticket based reports.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within six (6) hours of failure
Level of Service (2)			N/A
Level of Service (3)			Notification within three

			(3) hours of failure
Performance Category 3: Customer Satisfaction			
Performance Measure Description: Performance to support mission requirements (end-user satisfaction level)			
Who: Vendor		Frequency: Baseline survey followed by annual surveys	
Where: DON-wide		How measured: Customer Survey	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Moves, Adds and Changes			**SLA: 15**
Service Description: The contractor shall provide moves, adds and changes as specified in the Statement of Objectives. This SLA applies equally to software updates and other actions taken by the contractor as part of normal network/systems administration. (See SOO 3.1.13)			
Applicable Service Delivery Points: Fixed (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided)			
Levels of Services: B, HE, MC			
Performance Category 1: Responsiveness			
Performance Measure Description: Time to complete from initial notification to help desk. The measurement is an aggregate and average by site of all MACs within NMCI. The measurement begins after all appropriate approvals are granted for the MAC and ends when the MAC is complete. The time for MACs does not include time needed for security certifications and accreditation.			
Who: Contractor		Frequency: Each occurrence	
Where: Help Desk		How measured: Help Desk logs. While a single help desk order may involve many device actions, each will be accounted for as a separate action for purposes of metrics.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	<= 4 Days	<= 4 Days	<= 4 Days
Level of Service (2)	<= 3 Days	<= 3 Days	<= 3 Days
Level of Service (3)	<= 2 Days	<= 2 Days	<= 2 Days
Performance Category 1A: Responsiveness for **Remote Users Only** (CLIN 0001AE and 0101AE if the Option is exercised)			
Performance Measure Description: Time to complete from initial notification to help desk. The measurement is an aggregate and average by site of all MACs within NMCI. The measurement begins after all appropriate approvals are granted for the MAC and ends when the MAC is complete. The time for MACs does not include time needed for security certifications and accreditation.			
Who: Contractor		Frequency: Each occurrence	
Where: Help Desk		How measured: help desk logs; while a single help desk order may involve many device actions, each will be accounted for as a separate action for purposes of metrics.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	<= 6 Days	<= 6 Days	<= 6 Days
Level of Service (2)	<= 5 Days	<= 5 Days	<= 5 Days
Level of Service (3)	<= 2 Days	<= 2 Days	<= 2 Days
Performance Category 2: Government Operational Direction			
Performance Measure Description: This will be exercised primarily during crisis and contingency operations as directed by the CNNWC and MITNOC. Time to complete from initial notification to help desk. The measurement is an aggregate and average by site of all Government directed network changes within NMCI. The measurement begins at time call is received by help desk and ends when the change is implemented. The time for Government directed network changes applies to those changes that can be implemented through software or hardware configuration modifications. Excludes those changes that require physical modifications of existing infrastructure. In those instances where a physical modification to the infrastructure is necessary, contractor best effort is required, but time to complete must not exceed mission critical level of service for a standard			

MAC responsiveness.			
Who: Contractor		Frequency: Each occurrence	
Where: Help Desk		How measured: Help Desk logs. While a single help desk order may involve many device actions, each will be accounted for as a separate action for purposes of metrics.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (3)		<= 1 hour	
Performance Category 3: Incidents of repeat calls			
Performance Measure Description: Percentage of repeat calls to help desk regarding previously requested moves, adds, changes. The measurement is an aggregate and average by site of all MAC related calls to the Help Desk. Status calls to the Help Desk on MACs prior to the promised date are not considered repeat calls.			
Who: Vendor		Frequency: Each occurrence	
Where: Help Desk		How measured: Help Desk logs	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	<5%	<2%	<2%
Level of Service (2)	<5%	<2%	<2%
Level of Service (3)	<5%	<2%	<2%
Performance Category 4: Performance			
Performance Measure Description: Percentage of work done at scheduled time. The measurement is an aggregate and average by site of all MAC related calls to the Help Desk.			
Who: Vendor		Frequency: Each occurrence	
Where: Help Desk		How measured: Help Desk logs	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.92	0.96	0.96
Level of Service (2)	0.93	0.96	0.96
Level of Service (3)	0.94	0.98	0.98
Performance Category 5: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Software Distribution and Upgrades	**SLA: 16**
Service Description: The contractor provided service to distribute new and upgraded software to NMCI service delivery points and appropriate NMCI infrastructure. This capability includes, but is not limited to, COTS software, Government-off-the-Shelf (GOTS), custom application software, end-user and systems services, and enterprise functional servers.	
Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat	
Levels of Services: 3: : (Basic, High End, Mission Critical)	

Performance Category 1: Upgrade Backouts			
Performance Measure Description: "Upgrade Backouts" are specifically attributed to software upgrades performed via network services to a whole local domain that were not previously scheduled. Upgrade backouts are computed as the percentage of installed upgrades requiring backout divided by the total upgrades performed. An upgrade is defined as a single device software change, e.g., if 25 desktops are impacted by a software upgrade, then it will be reflected as 25 separate events. Desk-side software upgrades do not count towards the backout definition.			
Who: Vendor		Frequency: Monthly	
Where: End user & Operations center		How measured: Vendor shall log all upgrades requiring backout. This data will be audited by the Government or designated third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< 0.03	< 0.03	< 0.03
Level of Service (2)	< 0.03	< 0.03	< 0.03
Level of Service (3)	< 0.03	< 0.03	< 0.03
Performance Category 2: Upgrades Currency			
Performance Measure Description: "Upgrades Currency" is defined as the number of installed software releases that are equal to or more current than N-1 divided by the total number of software releases, where N is defined as the latest software release. The NMCI Configuration Control Board will review and approve all software upgrades based upon successful testing in an NMCI test lab; excludes software covered in SLA 2.3 (Standard Office Automation Software) and SLA 36.4 (Security Vulnerability Remediation). The Contractor shall provide a monthly list of software releases greater than N-1. Data logs shall be maintained for Government or designated third party audit.			
Who: Vendor		Frequency: Monthly	
Where: Operations center		How measured: Measured by the number of Installed Approved Software Upgrades divided by the number of Approved Software Upgrades.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.980	0.980	0.980
Level of Service (2)	0.980	0.980	0.980
Level of Service (3)	0.980	0.980	0.980
Performance Category 3: Patches currency			

Performance Measure Description: "Patches Currency" is defined as the number of released patches installed divided by the number of patches available. The NMCI Configuration Control Board will review and approve all patch installations based upon successful testing in an NMCI test lab; excludes patches covered in SLA 2.3 (Standard Office Automation Software) and SLA 36.4 (Security Vulnerability Remediation). Contractor shall provide a monthly list of software patches available from software providers and the status of their installation. All available patches will be installed within 30 days following approval from the Configuration Control Board. Lists shall be maintained for Government or designated third party audit.			
Who: Vendor		Frequency: Monthly	
Where: Operations center		How measured: Measured by the number of Installed Approved Patches divided by the number of Approved Patches.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.980	0.980	0.980
Level of Service (2)	0.980	0.980	0.980
Level of Service (3)	0.980	0.980	0.980
Performance Category 4: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: User Training			**SLA: 17**
Service Description: The training SLA measures the scope and effectiveness of user and security training. Vendor provided training service enables end users to effectively and securely use the features, capabilities, and services of the NMCI.			
Applicable Service Delivery Points: All end users			
Levels of Services: All			
Performance Category 1: Security Training Execution			
Performance Measure Description: Formal training will consist of a minimum of 8 hours per user per year. Training execution measures the proportion of the population receiving required and PCO approved training relating to information security. It equals the number of people receiving training divided by the total population requiring training (excluding personnel specifically identified by the PCO). The calculation excludes those users that do not make themselves available for training.			
Who: Vendor		Frequency: tracked continuously, reported monthly	
Where: End user		How measured: vendors records	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.95	0.95	0.95
Level of Service (2)	0.98	0.98	0.98
Level of Service (3)	1.00	1.00	1.00
Performance Category 2: User Training Execution			
Performance Measure Description: Formal user training will consist of a minimum of 8 hours per user per year and will address use of standard end user hardware and software. Training execution measures the proportion of the population receiving formal training relating to end user systems. It equals the number of people receiving training divided by the total population requiring training (excluding personnel specifically exempted by the Government as unavailable for training).			
Who: Vendor		Frequency: tracked continuously, reported monthly	
Where: End user		How measured: vendors records	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.95	0.95
Level of Service (2)		0.98	0.98
Level of Service (3)		1.00	1.00
Performance Category 3: User Training Availability			
Performance Measure Description: User training availability measures the proportion of population identified as requiring training (e.g., initial NMCI implementation, a change in technology or user interface, identification of user knowledge shortfall and upon contracting officer request) that have received the required training. It is intended that training to support change implementation will be provided prior to implementation of that change. In this case, measurement occurs at time of change implementation, or five days after identification of training requirement.			
Who: Vendor		Frequency: tracked continuously, reported monthly	
Where: End user		How measured: Vendors records	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.80	0.80	0.80
Level of Service (2)	0.80	0.90	0.90
Level of Service (3)	0.80	0.95	0.95

Performance Category 4: Quality			
Performance Measure Description: Evaluation by individuals receiving courses conducted 30 days after course completion. Measurement is self-assessment of the individual's ability to use the new capability at his/her job.			
Who: Vendor		Frequency: tracked continuously, reported monthly	
Where: End user		How measured: user surveys; measured as a percentage of respondees.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.80	0.80	0.80
Level of Service (2)	0.80	0.80	0.80
Level of Service (3)	0.80	0.80	0.80

Service Name: Unclassified Remote Access

SLA: 18

Service Description: Allow end users to access NMCI data network from remote locations using a dial-up link.

Applicable Service Delivery Points: Portable Seats, Embarkable Portable Seats

Levels of Services: 3: (Basic, High End, Mission Critical)

Performance Category 1: Availability

Performance Measure Description: The measurement is an aggregate and average by site of all RAS delivery point (unclassified) trouble reports at the Help Desk. Availability of NMCI infrastructure and remote access service required to allow dial in capability to the NMCI infrastructure and associated services. Measured from RAS service to the interface with external switched voice networks. Excludes any outages beyond the control of NMCI. Not counted against this SLA are problems associated with non-NMCI communications (NMCI external services).

Who: Contractor		Frequency: Monthly	
Where: RAS Delivery Points		How measured: Total hours - down time divided by total hours.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	> 0.995	0.995	0.995
Level of Service (2)	> 0.995	0.995	0.995
Level of Service (3)	> 0.997	0.995	0.995

Performance Category 2: Capacity

Performance Measure Description: Percentage of RAS connectivity surge capacity available beyond normal peak load. Measures potential to surge during times of increased RAS activity.

Who: Contractor		Frequency: Monthly	
Where: RAS Delivery Points		How measured: (Available peak load (calls) - Average peak load (calls)) / available peak load.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.3	0.3	0.3
Level of Service (2)	0.3	0.3	0.3
Level of Service (3)	0.3	0.3	0.3

Performance Category 3: Performance

Performance Measure Description: RAS modem data rate. All NMCI RAS modems will negotiate current industry standard connectivity rate, and support negotiation of lower rates based on distant modems and line quality. Assumes the use of an industry standard modem -- currently 56Kb/sec.

Who: Contractor		Frequency: Annually	
Where: RAS Delivery Points		How measured: industry/commercial standard for data rate as determined by contractor/Government CCB	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	Yes	Yes	Yes
Level of Service (2)	Yes	Yes	Yes
Level of Service (3)	Yes	Yes	Yes

Performance Category 5: Customer Satisfaction

Performance Measure Description: Level of customer satisfaction.

Who: Contractor	Frequency: Initially measured at six month intervals for first year of contract and then yearly

		thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Classified (secure) Remote Access			**SLA: 19**
Service Description: To allow end users to access the NMCI data network from remote locations using a secure dial-up capability.			
Applicable Service Delivery Points: Portable Seats and Embarkable Portable Seats with classified connectivity			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: The measurement is an aggregate and average by site of all RAS delivery point (unclassified) trouble reports at the Help Desk. Availability of NMCI infrastructure and secure remote access service required to allow secure dial in capability to the NMCI infrastructure and associated services. Measured from classified RAS service to the interface with external switched voice networks. Excludes any outages beyond the control of NMCI. Not counted against this SLA are problems associated with non-NMCI communications (NMCI external services).			
Who: Contractor		Frequency: Monthly	
Where: RAS Delivery Points		How measured: Total hours - down time divided by total hours.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	> 0.995	0.995	0.995
Level of Service (2)	> 0.995	0.995	0.995
Level of Service (3)	> 0.997	0.995	0.995
Performance Category 2: Capacity			
Performance Measure Description: Percentage of CRAS connectivity surge capacity available beyond normal peak load. Measures potential to surge during times of increased CRAS activity.			
Who: Contractor		Frequency: Monthly	
Where: RAS Delivery Points		How measured: (Available peak load (calls) - Average peak load (calls)) / available peak load.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.3	0.3	0.3
Level of Service (2)	0.3	0.3	0.3
Level of Service (3)	0.3	0.3	0.3
Performance Category 3: Performance			
Performance Measure Description: Classified RAS modem data rate. All NMCI Classified RAS modems will negotiate current industry standard connectivity rate, and support negotiation of lower rates based on distant modems and line quality. Assumes use of industry standard modem -- currently 56Kb/sec.			
Who: Contractor		Frequency: Annually	
Where: Classified RAS Delivery Points		How measured: industry/commercial standard for data rate	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	Yes	Yes	Yes
Level of Service (2)	Yes	Yes	Yes
Level of Service (3)	Yes	Yes	Yes
Performance Category 5: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			

Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Portable Workstation Wireless Dial-in **SLA: 20**			
Service Description: Vendor supplied ancillary device to support wireless, mobile connectivity to NMCI for end-user portable computing requirements. This includes the device itself and the supporting service.			
Applicable Service Delivery Points: Portable Seat and Embarkable Portable Seat with Full Service			
Levels of Services (seats): 3: Basic, High End, Mission Critical			
Performance Category 1: Meantime to repair/replace for hardware components.			
Performance Measure Description: The meantime to repair wireless connection devices is an aggregate and average by site of the time to repair wireless devices, as determined from trouble tickets at the Help Desk. The performance metric measures ability to physically deliver a replacement wireless connection device to the NMCI end user.			
Who: Vendor		Frequency: Per event basis, reported monthly	
Where: End user		How measured: Measured as the time to restore service to user from initiation of the help desk ticket.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	98% within 3 bus days	98% within 3 bus days	98% within 3 bus days
Level of Service (2)	98% within 3 bus days	98% within 3 bus days	98% within 3 bus days
Level of Service (3)	99% within 1 bus days	99% within 1 bus days	99% within 1 bus days
COMMENTS: Target levels are listed above, industry suggested meantime calculated as follows: Mean time to repair is the aggregate elapsed time to restore functionality for all Severity 1 and 2 problem tickets closed during the month, and dividing by the number of such problem tickets closed during the month. Elapsed time to restore is the average elapsed time between the problems start time as recorded in the problem ticket and the restoration of functionality. (Repair time resulting from Force Major events are not included.)			
Performance Category 3: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Organizational Messaging Service			**SLA: 20A**
Service Description: Defense Messaging System (DMS) provides writing, release, sending and receipt of organizational messaging. DMS encompasses hardware, software, procedures, and standards. The NMCI will provide the DMS services.			
Applicable Service Delivery Points: All four data seats and their upgrades			
Levels of Services (seats): 2: **(**Basic, and Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: DMS availability is defined as the portion of time that vendor-provided DMS is available or 'up' for sending and receiving DMS and is measured in terms of percentage of available time in a month. Formula is: (# of hours in Month – DMS outage time in hours) / number of hours in Month. The outage time includes all scheduled and unscheduled DMS service affecting outages. Exception is scheduled pre-agreed outage. Assumptions: does not address problems associated with network service; addresses only availability of the DMS server; all DMS servers are under the management of the contractor and located at the contract determined aggregation point (base, regional server farm, etc.).			
Who: Contractor		Frequency: Measured continuously, averaged hourly, and reported monthly.	
Where: NMCI DMS Server		How measured: Vendor monitors email server availability and reports % availability monthly. Data audited by Government or a designated third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.995	0.995
Level of Service (3)		0.997	0.997
Performance Category 2: Problem Resolution			
Performance Measure Description: Elapsed time from the outage until the service is restored to normal operating performance. The measurement will be an aggregate and average by site of the time to restore service following Help Desk notification. The values indicated represent total time to restore from time of non-availability (includes response time).			
Who: Vendor		Frequency: Continuous monitoring, monthly reported	
Where: NMCI-wide		How measured: Based on Help Desk logs and enterprise management system	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		1 hour	1 hour
Level of Service (2)			
Level of Service (3)		15 minutes	15 minutes
Performance Category 3: Interoperability			
Performance Measure Description: For Organizational Messaging, the interoperability requirement is a two-way DMS Email exchange within DON (to include IT-21, MCTN, and OCONUS) and the two-way exchange between DON and other DoD/Joint partners. DMS interoperability will be measured by multiple methods: (1) by end user incident reporting at the desktop and by agents located at both NMCI sites and at DoD/Joint sites operating on other networks, and (2) Help Desk Interoperability Trouble Tickets. -The validation of DMS exchange may be performed by using SMTP/X.400 scripts, or other equivalent methodology. The measurement will include: sending and receiving email, and include validation of			

signed DMS messages and encrypted DMS messages. The definition of DMS interoperability failure is any two occurrences of unsuccessful transfer at any one site over six (6) consecutive tests (or 48 hours). Events at which DMS interoperability will be measured: at installation; three (3) times daily; plus additional measurements as appropriate to ensure Joint Partner interoperability.

- Interoperability measurement will also be performed by the submission by users of Help Desk Interoperability Trouble Tickets. The definition of DMS interoperability failure is exceeding the Help Desk reporting of threshold value of 10 DMS interoperability trouble tickets referring to a single domain (e.g., Air Force) over a 12 hour period.

Coordination for establishment of the Joint/DoD site constellation is the responsibility of the Government. Notification of the Government is required for DMS interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor		Frequency: Measured three (3) times daily for user agents; continuous for Help Desk. Reported monthly.	
Where: Measured from an NMCI user agent (located at an NMCI workstation) or an equivalent client configuration operated from a NOC test installation to test points identified in the NMCI Interoperability Test Plan, to include NMCI and DoD/Joint sites. Help Desk data will be captured from interoperability trouble reports.		How measured: (1) End User Incident Reports to Help Desk, and (2) Remote Locked Down Workstation test results by running DMS scripts. Collection and analysis granularity will be by organization (domains) for script-based tests and by organization, site, claimant/command for trouble ticket based reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three (3) hours
Level of Service (2)			N/A
Level of Service (3)			Notification within three (3) hours

Performance Category 4: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)			
Level of Service (3)		0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Desktop Video Teleconference Services			**SLA: 21**
Service Description: Vendor coordinated service where users can initiate and participate in live full duplex video/audio/data teleconferences. The exchange (of voice, video, graphics, and T.120 data) must be able to be between two sites (point to point terminal connections) or among a large number of persons or parties of no less than 50 persons on a single (multi-point) video.			
Applicable Service Delivery Points: Workstation seats with optional service			
Levels of Services: 2: (Basic, High End)			
Performance Category 1: Availability			
Performance Measure Description: Represents the VTC hardware, software, and supporting infrastructure being up and capable of allowing the end user to gain access and participate in VTC conferencing. Formula is: (# of hours in month X # of VTC units - VTC outage time in hours) / number of hours in month X number of VTCs. The outage time includes unscheduled hardware and related outages. Exception is scheduled pre-agreed outage. Excludes outages associated with desktop hardware and operating system, and network infrastructure not directly relating to VTC services. The VTC is considered to be up (or available) unless there is a trouble ticket at the Help Desk.			
Who: Contractor		Frequency: At implementation and yearly	
Where: VTC sites		How measured: Measured at the audiovisual device and, as determined by inspection, provides broadcast quality service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.995	0.995
Level of Service (2)		0.995	0.995
Performance Category 2: Audio and Video Quality (Integrity)			
Performance Measure Description: Clarity of voice and video; initial quality will be reviewed and upgraded as per Performance Category 2.			
Who: Contractor		Frequency: At implementation and yearly	
Where: Implementation sites		How measured: Testing	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	>= 30 frames/sec.	>= 15 frames/sec.	>= 15 frames/sec.
Level of Service (2)	>= 30 frames/sec.	>= 30 frames/sec.	>= 30 frames/sec.
Performance Category 3: System Performance			
Performance Measure Description: This measure applies to the time of initial service provisioning. Capability is a measure of desktop VTC performance relative to current state of the shelf available systems. Level of service 1 (Basic) performance includes greater than or equal to 70% of total system performance reflected in high-end commercially available state-of-the-shelf desktop VTC. Level of service 2 (High End) includes equal to or greater than 90% of total system performance found on commercially available workstations.			
Who: Contractor		Frequency: Quarterly	

Where: NMCI Customers using service		How measured: Analysis of state-of-the shelf technology versus NMCI basic and high-end workstation capabilities. An acceptable benchmark program will be used to establish workstation performance baseline. Assumption: Service performance baseline is tied directly to performance of transmission medium and is assumed to be covered elsewhere in related SLAs (i.e., Bit error rate (BER), Jitter, packet loss, and latency) factors.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		>= 70% relative capability	>= 70% relative capability
Level of Service (2)		>= 90% relative capability	>= 90% relative capability
Performance Category 4: Gateway Capacity			
Performance Measure Description: The NMCI VTC architecture must have sufficient gateways to support all on line VTC users. Gateways should be provided for connectivity between dissimilar algorithms (H.320 and H.323), dissimilar bandwidth speeds, into closed proprietary networks (e.g., DVSG, FTS2000/2001, and DSN), and between bonded and 2X64 calls. The measurement is a ratio of the number of available gateways divided by the number of required gateway. The gateway bandwidth and architecture should be sufficient to allow (metric value) % of assigned desktop VTC users to hold sessions simultaneously without degradation.			
Who: Contractor		Frequency: Measured continuously and reported monthly.	
Where: VTC sites		How measured: Tracked by scheduling and management software, and supplemented by users calls to Help Desk to report non-availability.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.80	0.80
Level of Service (2)		0.95	0.95
Performance Category 5: Interoperability			
Performance Measure Description: For Desktop VTC, the interoperability requirement is for NMCI users to interface with and exchange video/audio data with other DON users, DoD/Joint mission partners, and commercial partners. VTC services within NMCI will be the H.323 protocol based but must be backward compatible with H.320 and analog legacy services. IP Desktop Video will use the same transmission medium as voice and data and should have network jitter of less than 150 ms and latency less than 100 ms for optimal interoperability. Moreover, NMCI will support both 15 and 30 frames per second video, as well as IP Multicast. Desktop VTC interoperability will be measured by multiple methods: by end user incident reporting at the desktop, and by user agents located within NMCI and at external locations served by other than NMCI networks. The validation of Desktop VTC interactions may be performed by using appropriate video scripts, manual intervention, or other equivalent methodology. The measurement will include: interaction with a Navy and/or Marine Corps system, a DoD/Joint system located outside NMCI, and a commercial system, with a combination of H.323 and H.320 based data streams. Desktop VTC interoperability is defined here as the ability to establish and maintain and exchange useful and effective video and audio between any two NMCI clients regardless of WAN provider. Interoperability will be measured in multiple ways: (1) proof of interoperability, (2) performance testing,			

and (3) Help Desk Interoperability Trouble Tickets.

- The proof of interoperability is to establish and maintain connection for the purpose of transferring Desktop VTC between the test clients. This will be demonstrated by successful execution of scripts or equivalent testing. The definition of a failure is two consecutive unsuccessful executions of the test script between test clients.

- Performance testing is end-to-end testing between two video clients (or equivalent configurations), as measured by the latency between the two clients. The definition of failure is exceeding the Government and ISF agreed upon baseline values for latency (as supporting Desktop VTC).

- Interoperability measurement for Desktop VTC will also be performed by submission by users of Help Desk Interoperability Trouble Tickets. The definition of interoperability failure is exceeding the Government and ISF agreed upon Help desk reporting threshold value.

Events at which Desktop VTC will be measured: at installation and three (3) times daily; plus additional measurements as appropriate to ensure interoperability. Notification of the Government is required for VTC interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor		Frequency: Measured three (3) times daily for user agents; continuous for Help Desk. Reported monthly.	
Where: Measured from an NMCI user work station or NMCI video test configuration operated at an NMCI NOC test installation to another test station operated at a DoD/Joint and Commercial site. Test points will be identified in the NMCI Interoperability Test Plan. Help Desk data will be captured from interoperability trouble reports.		How measured: (1) Application scripts via remote agent and (2) End User Incident Reports to Interoperability Help Desk. Collection and analysis granularity will be test site for script-based tests and by organization, site, claimant/command for trouble ticket based reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within 1 working day
Level of Service (2)			N/A
			Notification within three (3) hours
Performance Category 6: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Performance Category 7: Reliability of Session Initiation			

Performance Measure Description: A fully successful conference is one that comes up on first connection attempt and remains up with no loss in connectivity for the duration of the VTC, regardless of manual or automated conference initiation. Includes end-to-end internal to NMCI. Excludes any external conferences involving sites not on the NMCI network. Metric reflects percentage of time conference initiated on first called.			
Who: Contractor		Frequency: Measured continuously, reported monthly.	
Where: VTC sites		How measured: Video conference logs derived from automatic scheduling system; supplemented by user reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.85	0.85
Level of Service (2)		0.85	0.85

Service Name: Voice Communications			**SLA: 22**
Service Description: Allows end user to send and receive voice calls to and from other users inside NMCI domain and users external to the domain. Includes access to the Public Switched Telephone Network (PSTN), FTS-2001, and the Defense Switched Network (DSN). Includes optional Multi-Level Precedence and Preemption (MLPP) for DSN service. For unsecured voice communications, includes voice mail, conference calling, and call forwarding capabilities for each end-user. Note: for voice communications the three defined Levels of Service (LOS) are Basic, Business, and Mission Critical; the LOS 1 provides a functionality excluding voice mail, calling number delivery, conference call, and multi-line functions. LOS 2 includes basic plus those Custom Local Area Signaling Services (CLASS)-type functionalities excluded in LOS 1. LOS 3 has a primary focus of greater voice service availability and customer satisfaction.			
Applicable Service Delivery Points: Voice Seats			
Levels of Services: 3 (Basic, Business, and Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: Availability is defined as the average ratio of time voice services will be available to the end user over a one month period. The Voice measurement will be an aggregate and average by site of Voice outage time. Availability is calculated as follows: (# of Hours per month-# of Outage time in hours)/ # of hours per month. Voice services are considered "unavailable" if the termination is out-of-service (i.e., loses the ability to originate, complete, or terminate calls) for any period of time. Availability is for intra NMCI services to include the interface to external networks. This performance category excludes problems associated with service external to NMCI. The components included in this availability computation are all service-affecting elements that fall within the vendor provided demarcation, that is, if the vendor is providing the user hand-set to the switch, then the computation includes those components and every thing in between (e.g.., key system, PBX, switch, cable plant, channel banks). Where there is a failure of one path in a redundant system, and there is no loss of service, it is considered that there is no loss of availability.			
Who: Contractor		Frequency: Monitored continuously, reported monthly	
Where: At the end user		How measured: Measured by performance monitoring and reporting systems and procedures to include trouble tickets and Help Desk logs	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.9999	0.9999
Level of Service (2)	N/A	0.9999	0.9999
Level of Service (3)	0.998	0.99995	0.99995
Performance Category 2: Dial Tone Delay			
Performance Measure Description: Dial tone delay is a measure of the time from off-hook to the provision of dial tone during the Busy hour.			
Who: Contractor		Frequency: Measured monthly and randomly on one per cent of total voice seats.	
Where: At the end user		How measured: Test equipment and sampling.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		Not more than 1.5% calls offered encounter delay > 3 sec	Not more than 1.5% calls offered encounter delay > 3 sec

Level of Service (2)		Not more than 1.5% calls offered encounter delay > 3 sec	Not more than 1.5% calls offered encounter delay > 3 sec
Level of Service (3)		Not more than 1.5% calls offered encounter delay > 3 sec	Not more than 1.5% calls offered encounter delay > 3 sec
Performance Category 3: Grade of Service (GOS) – End User-to-End User Calls (Intra NMCI)			
Performance Measure Description: GOS is the proportion of calls that cannot be completed during the busy hour because of limits in the call handling capacity of one or more network elements. The GOS is the expected probability of calls not being completed. For example, P.01 indicates that 1 percent of the calls not being completed (1 out of 100 calls) as measured using Erlang B method.			
Who: Contractor		Frequency: Measured every 5 minutes and reported monthly.	
Where: At the end user		How measured: Traffic measurement analysis.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		P.05	P.05
Level of Service (2)		P.05	P.05
Level of Service (3)		P.01	P.01
Performance Category 4: Grade of Service (GOS) – End User to External Networks			
Performance Measure Description: GOS is the proportion of calls that cannot be completed during the busy hour because of limits in the call handling capacity of one or more network elements. The GOS is the expected probability of calls not being completed. For example, P.01 indicates that 1 percent of the calls not being completed (1 out of 100 calls) as measured using Erlang B method.			
Who: Contractor		Frequency: Measured every 5 minutes and reported monthly.	
Where: At the end user		How measured: Measured at the Service Delivery Point using traffic measurement analysis.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		P.01	P.01
Level of Service (2)		P.01	P.01
Level of Service (3)		P.01	P.01
Performance Category 5: Latency			
Performance Measure Description: User-to-user latency for voice calls across the NMCI voice network.			
Who: Contractor		Frequency: Measured every five minutes, reported monthly.	
Where: SDP		How measured: Acceptable measurement protocol measured one-way to multiple sites throughout the day.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		120 ms	120 ms
Level of Service (2)		120 ms	120 ms
Level of Service (3)		120 ms	120 ms
Performance Category 6: Delay Variation / Jitter *			

Performance Measure Description: Jitter is the variation from when a packet was expected to be received and when it actual is received.			
Who: Contractor		Frequency: Measured every five minutes, reported monthly.	
Where: SDP		How measured: Measurement is done with a protocol analyzer monitoring the latency introduced by the jitter buffer itself.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		60 ms	60 ms
Level of Service (2)		60 ms	60 ms
Level of Service (3)		60 ms	60 ms
Comment: *Jitter specification is applicable if voice services are provided over a packet network. Jitter is particularly disruptive to voice communications because it can cause audible pops and clicks on the voice call.			
Performance Category 7: Trouble Repair Times			
Performance Measure Description: Time to Repair is expressed as the time from notification of the contractor by customer or discovery by the contractor, whichever is earlier, until restoration of voice service.			
Who: Contractor		Frequency: Each occurrence.	
Where: Help Desk		How measured: Help Desk logs.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		24 hours	24 hours
Level of Service (2)		24 hours	24 hours
Level of Service (3)		2 hours	2 hours
Performance Category 8: Operator-Assisted Calling			
Performance Measure Description: The contractor shall provide operator services to include directory assistance (i.e., 411), enhanced 911 capabilities, and 24-hour operator assisted calling including DISN OCONUS calls.			
Who: Contractor		Frequency: Sample and report monthly on a representative sample size.	
Where: At the end user		How measured: Wait time from the time a customer dials the operator until requested assistance is provided.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		2 minutes	2 minutes
Level of Service (2)		2 minutes	2 minutes
Level of Service (3)		2 minutes	2 minutes
Performance Category 9: Absolute Echo Path Delay			
Performance Measure Description: Absolute Echo Path Delay is twice the one-way transit time delay of a signal through a switching system connection path. Ninety-nine percent of the connections shall have a round-trip echo path delay less than or equal to the following values with a minimum echo path loss of 6 dB.			
Who: Contractor		Frequency: Continuously monitored, reported monthly.	
Where: Random Digital Test Points throughout network		How Measured: Non-intrusive Single Point Measurement system measuring absolute echo path delay (in milliseconds).	

Level of Service (1)		<25 ms	<25 ms
Level of Service (2)		<25 ms	<25 ms
Level of Service (3)		<25 ms	<25 ms

Performance Category 10: Interoperability

Performance Measure Description: For Voice, the interoperability requirement is for NMCI users to interface with and exchange audio with other DON users, DoD/Joint mission partners, and commercial partners. Voice services within NMCI may employ analog, digital, and converged network technologies (e.g. Voice over IP (VoIP)). If VoIP technology is implemented, NMCI will use the same transport medium as video and data, as provided by DISA and ISF, while installing Quality of Service/Class of Service (QoS/CoS) and other bandwidth width efficiency schemes to ensure voice network quality is maintained. Potential interoperability discrepancies exist at the PSTN/ISDN gateways to VoIP, at the Local Exchange Carriers (standardized protocol and implementation), and generally in all network segments. Voice interoperability will be measured by multiple methods: by end user incident reporting at the desktop, and by test configurations located within NMCI and at external locations served by other than NMCI networks. The validation of Voice interoperability will include testing such as: complete feature and function testing, call capacity testing, bit error rate analysis, and other tests, as deemed appropriate. The measurement will include: interaction with a Navy and/or Marine Corps system, DoD/Joint systems located outside NMCI, other government systems (law enforcement, 911, etc.) and the commercial voice network.

Voice interoperability is defined here as the ability to send and receive voice calls and use the complete set of NMCI voice features and functions between any NMCI client and called station regardless of WAN provider (NMCI, DSN, FTS2001, PSTN, etc.). Interoperability will be measured in multiple ways: (1) proof of interoperability, (2) performance testing, and (3) Help Desk Interoperability Trouble Tickets.

- The proof of interoperability is to establish and maintain connection for the purpose of transferring Voice communications and appropriate features/functions between the test end points (called and calling stations) regardless of location. This will be demonstrated by successful execution of appropriate tests. The definition of a failure is two consecutive unsuccessful executions of the test scenario between test end points.

- Performance testing is an end-to-end test between two voice end points. Performance may be measured by round-trip transaction latency, bit error rate, end-to-end availability, echo, jitter, multi-level precedence and preemption (MLPP), wander, call setup time, grade of service, reliability, etc. The definition of failure is exceeding the Government and ISF agreed upon baseline values for such tests.

- Interoperability measurement for Voice will also be performed by the submission by users of Help Desk Interoperability Trouble Tickets. The definition of interoperability failure is exceeding the Government and ISF agreed upon Help Desk reporting threshold value.

Events at which Voice will be measured: at installation and three (3) times daily; additional measurements as appropriate to ensure interoperability. Notification of the Government is required for Voice interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor	Frequency: Measured three (3) times daily for user agents; continuous for Help Desk. Reported monthly.

Where: Measured from an NMCI voice seat or NMCI test configuration operated at an NMCI NOC test installation to another test station operated at a DoD/Joint and Commercial site. Test points will be identified in the NMCI Interoperability Test Plan. Help Desk data will be captured from interoperability trouble reports.		How measured: (1) Voice interoperability test scenarios and (2) End User Incident Reports to Interoperability Help Desk. Collection and analysis granularity will be test site for script-based tests and by organization, site, claimant/command for trouble ticket based reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within 1 working day
Level of Service (2)			
Level of Service (3)			Notification within three (3) hours
Performance Category 11: Customer Satisfaction			
Performance Measure Description: User satisfaction includes performance of user services and voice quality.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	N/A	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Voice Mail			**SLA: 22A**
Service Description: The contractor will provide an Integrated Voice Messaging System (IVMS). Each IVMS shall provide voice messaging transmission, reception, and voice message storage 24 hours-per-day, seven days-per-week, 365 days-per-year except for periodic maintenance downtime. Each IVMS shall be interoperable with the DSN and shall provide a P.05 grade of service to its subscribers. Phone sets will advertise waiting messages visually and audibly.			
Applicable Service Delivery Points: All Voice Seats and Data Seats with Voice capability			
Levels of Services: 1: (Business)			
Performance Category 1: Voice Mail Grade of Service			
Performance Measure Description: GOS is the proportion of calls that cannot be completed during the busy hour because of limits in the call handling capacity of one or more network elements. The GOS is the expected probability of calls not being completed. For example, P.01 indicates that 1 percent of the calls will not be completed (1 out of 100 calls) as measured using the Erlang B method.			
Who: Contractor		Frequency: Measured every 5 minutes and reported monthly.	
Where: At the end user		How measured: Traffic Management analysis.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		N/A	N/A
Level of Service (2)		P.05	P.05
Level of Service (3)		N/A	N/A
Performance Category 2: Voice Mailbox Size			
Performance Measure Description: Voice Mailbox size is the measurement of storage space allocated per user for outgoing, incoming and archive messages.			
Who: Contractor		Frequency: Initially measured at system implementation and then sampled monthly.	
Where: At the Voice mail system		How measured: System measurement and test.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		N/A	N/A
Level of Service (2)		10 minutes	10 minutes
Level of Service (3)		N/A	N/A
Performance Category 4: Customer Satisfaction			
Performance Measure Description: User satisfaction includes performance of user services and voice quality.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		N/A	N/A
Level of Service (2)		0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)		N/A	N/A

Service Name: Basic Help Desk Services			**SLA: 23**
Service Description: Vendor services providing end user technical assistance for solving NMCI issues to the end user's satisfaction. Service provider will be the single point of contact for all NMCI users. The user can interact or communicate with help desk by phone, email, and/or fax. Includes timely notification by help desk of planned or unplanned system degradation of the NMCI.			
Applicable Service Delivery Points: All Voice, Video and Data Workstations			
Levels of Services (seats): 3: Basic, High End, Mission Critical			
Performance Category 1: Responsiveness			
Performance Measure Description: 1. Response time (number of rings before connect, average time in queue until appropriate technician contacted). Automatic answer to voice menus within the response timeframe is acceptable. The measurement is an aggregate and average of the response time via phone at the Help Desk.			
Who: Contractor		Frequency: Monthly	
Where: Help Desk		How measured: Periodically audited by Government or third party	
	B Value	Pre-Negotiation	Contract SLA
Prime Time	See Comment #1	See Comment #1	See Comment #1
Non-Prime Time	See Comment #2	See Comment #2	See Comment #2
COMMENTS: #1 Prime time average is <=40 seconds with 90% of the calls answered within 60 seconds and 100% of the calls in 120 seconds. Comment #2: Non-prime time average <= 55 seconds with 90% of the calls answered within 120 seconds and 100% answered in 240 seconds.			
Performance Category 1: Responsiveness			
Performance Measure Description: 2. Percentage of calls abandoned. The general description for the measurement is the percentage of calls in which the caller disconnects before an analyst or voice mail picks up. The measurement is a monthly aggregate and average by site of the percentage of abandoned calls at the Help Desk.			
Who: Contractor		Frequency: Monthly	
Where: Help Desk		How measured: Periodically audited by Government or third party	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	less than 3%	less than **7**%	less than 7%
Level of Service (2)	less than 3%	less than **7**%	less than 7%
Level of Service (3)	less than 3%	less than 5%	less than 5%
Performance Category 1: Responsiveness			
Performance Measure Description: 3. Level of customer satisfaction			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter. A minimum of 50 percent of survey participants must have used Help Desk within past year.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Performance Category 1: Responsiveness

Performance Measure Description: 4. General Administration including Establishing User Accounts and Update/Reset Passwords. The measurement is an aggregate and average of the time spent by site on establishing user accounts and update/reset of passwords from the Help Desk. This is restricted to calls at the Help Desk and does not include break fix, which is a desk side service. Time associated with gaining the required approvals (e.g., establishing user accounts) is not included in the measurement. First metric listed reflects time to establish user account; second metric reflects time to reset password; the percentage is applicable to both.

Who: Contractor	Frequency: Monthly
Where: Help Desk	How measured: Compiled in monthly Help Desk report. Periodically audited by Government or third party.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	1 business day 95%	1 day / 2 hrs (95%)	1 day / 2 hrs (95%)
Level of Service (2)	4 hrs 98%	4 hrs / 1 hr (98%)	4 hrs / 1 hr (98%)
Level of Service (3)	1 hour 99.5%	1 hr / 15 min (99.5%)	1 hr / 15 min (99.5%)

Performance Category 1: Responsiveness

Performance Measure Description: 5. Percentage of calls resolved on first contact to help desk. This includes all requests that can be resolved at the help desk. Calls requiring onsite actions (maintenance or reconfiguration) are not included. The measurement is a monthly aggregate and average by site of the resolved calls at the Help Desk.

Who: Contractor	Frequency: Monthly
Where: Help Desk	How measured: Compiled in monthly Help Desk report. Periodically audited by Government or third party.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.65	0.65	0.65
Level of Service (2)	0.65	0.65	0.65
Level of Service (3)	0.80	0.80	0.80

COMMENTS: The Industry targeted average for first call resolution is 65%.

Performance Category 1: Responsiveness

Performance Measure Description: 6. Compliance with escalation procedure

Who: Contractor	Frequency: Monthly
Where: Help Desk	How measured: Compiled in monthly Help Desk report. Periodically audited by Government or third party.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	Satisfactory	Satisfactory	Satisfactory
Level of Service (2)	Satisfactory	Satisfactory	Satisfactory
Level of Service (3)	Satisfactory	Satisfactory	Satisfactory

Performance Category 1: Responsiveness			
Performance Measure Description: 7. User Notification by helpdesk for unplanned service outages, and return to service status prior to restore. In the case of an emergent requirement to shut down a service, notification should be given prior to the shut down. The notice to the affected NMCI end users is via their LAN attached seat.			
Who: Contractor		Frequency: Annually	
Where: Help Desk		How measured: Compiled in monthly Help Desk report. Periodically audited by Government or third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	within 15 mins	within 15 mins	within 15 mins
Level of Service (2)	within 15 mins	within 15 mins	within 15 mins
Level of Service (3)	within 15 mins	within 15 mins	within 15 mins

Service Name: WAN Network Connectivity			**SLA: 24**
Service Description: Vendor provided service to connect geographically separated Navy and Marine Corps users/devices. It provides connection to external networks, to include: Non-Secure IP Router Network (NIPRNET), Secure IP Router Network (SIPRNET), FTS-2001, Defense Research Engineering Network (DREN), Defense Switched Network (DSN), Public Switched Telephone Network (PSTN), NMCI provided wide area transport services (commercial/DISA), and the Internet. Other external networks may be incorporated based user requirements.			
Applicable Service Delivery Points: NMCI Infrastructure, Organizations, NMCI OP Center, Pierside SDP, Fleet Teleports, Non-DON organizations			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: Availability of connectivity to WAN portal, to include connectivity and capacity. Three principles of availability are established: eliminating single points of failure, reliable crossover, and prompt notification of failures. The measurement is an aggregate of all WAN end points and WAN outage time, but will provide a breakout of types of WANs (if applicable). WAN availability is calculated as the percentage of time that the WAN network is capable of accepting and delivering NMCI application data to the total time in the measurement period. It is measured from portal access point to the WAN. The calculation for WAN availability for a given month is as follows: (24 hours X days in month X # of WAN end points – Sum of WAN portal outage times) / (24 hours X days in month X # of WAN end points). Computation excludes scheduled, pre-agreed portal outages. External networks will not be calculated as part of this SLA.			
Who: Vendor		Frequency: Continuous monitoring, 24 hour averaging, w/ reports monthly	
Where: WAN Service Delivery Points		How measured: Random sampling can be performed on number of WAN end points and time periods as specified by the Government. Random sampling	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.9999	0.9999	0.9999
Level of Service (2)	0.9999	0.9999	0.9999
Level of Service (3)	0.99999	0.99999	0.99999
Performance Category 2: Latency (See SLA 10)			
Performance Category 3: Percent Bandwidth Used			
Performance Measure Description: Average utilization compared with available, useable capacity. The calculation will be under normal operations, times of surges will exceed these values. This information will be reported as an average, range and distribution, and granularity reflecting data for normal and peak network conditions.			
Who: Third party		Frequency: Measured continuously, summarized hourly, and reported monthly.	
Where: SDP to SDP		How measured: Interface utilization statistics and Stress test.	

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.4	0.4	0.4
Level of Service (2)	0.4	0.4	0.4
Level of Service (3)	0.3	0.3	0.3

Performance Category 4: Problem Resolution
Wide Area Network Service

Performance Measure Description: Elapsed time from the outage until the service is restored to normal operating performance. The measurement will be an aggregate and average by site of the time to restore service following Help Desk notification. The values indicated represent total time to restore from time of non-availability (includes response time). Mission critical users will be physically dual homed and, in the event of an outage, will only lose their redundancy. The problem resolution addressed in this performance category is for restoration of service where there is complete outage (to include redundancy). Also specifies response time to begin repair.

Who: Vendor	Frequency: Continuous monitoring, monthly reported
Where: NMCI-wide	How measured: Event logs, first metric is response time, and second value is time to restore.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	30 minutes / 3hours	30 minutes / 3hours	30 minutes / 3hours
Level of Service (2)	15 minutes / 1 hour	15 minutes / 1 hour	15 minutes / 1 hour
Level of Service (3)	3 minutes / 30 minutes	3 minutes / 30 minutes	3 minutes / 30 minutes

Performance Category 4A: Problem Resolution – Network Redundancy

Performance Measure Description: Elapsed time from the outage until the redundant path service is restored to normal operating performance. The measurement will be an aggregate and average by site of the time to restore redundant service following network management system detection of its loss. The values indicated represent total time to restore from time of non-availability (includes response time). The problem resolution will be to restore redundancy. Also specifies response time to begin repair.

Who: Vendor		Frequency: Continuous monitoring, monthly reported	
Where: NMCI-wide		How measured: Event logs, first metric is response time, and second value is time to restore.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		30 minutes / 8hours	30 minutes/8 hours
Level of Service (2)			
Level of Service (3)		3 minutes / 3 hours	3 minutes/3 hours

Performance Category 5: Interoperability

Performance Measure Description: For NMCI WAN, the interoperability requirement is focused on the WAN edge segments between DON bases and the NMCI Intranet, provisioned by a DISN service provided by DISA or as augmented by the vBNS+ provided by WorldCom. Other aspects of the WAN interoperability are provided in SLA 10 (Intranet); SLA 11 (Joint/DoD), SLA 12 (Internet), SLA 27 (External Networks which includes IT-21/ MCTN, and selected major industry partners) and SLA 35 (SIPRNET). The WAN-base demarcation is the point at which the two WAN service providers and the NMCI base provider must interface. One of the issues of interoperability is the manner in which routing is performed (IP packet headers are advertised) and this requires that protocols and procedures be consistently maintained. Interoperability will be measured by user agents located within NMCI. The

user agents will employ scripts (e.g., IP, Windows, DOS) to demonstrate OSI layer 1-4 interoperability. WAN interoperability is defined here as the ability to establish and maintain network connectivity and exchange useful and effective information between a base and its supporting WAN, regardless of WAN provider. WAN interoperability testing for the purposes of the BAN-WAN interface (addressed here) will consist of proof of interoperability testing. Performance testing is addressed separately in SLA 10 and this testing encompasses base point-of-presence to base point-of-presence, i.e., to include crossing this BAN-WAN interface.

-The proof of interoperability is establishing and maintaining connection for the purpose of transferring information between the test clients. This will be demonstrated by successful execution of IP based script, or equivalent testing. The definition of a failure is two consecutive unsuccessful executions of the test script between test clients.

These measures will be performed upon installation, three (3) times daily, plus additional measurements as appropriate to ensure interoperability. Notification of the Government is required for Intranet interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor		Frequency: Measured three (3) times daily for user agents. Reported monthly.	
Where: Measured (concurrent with SLA 10) from an NMCI user agent located at a DISN supported NMCI bases and a client at a vBNS+ supported NMCI base. Test points will be identified in the NMCI Interoperability Test Plan.		How measured: Remote agent locked down workstation test conducted to verify successful exchange of IP scripts. Collection and analysis granularity will be by test sites.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three (3) hours
Level of Service (2)			N/A
Level of Service (3)			Notification within one (1) hour
Performance Category 6: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Performance evaluation by technical Government representative at every area/site.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	N/A	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: BAN/LAN Communication Services **SLA: 25**			
Service Description: Vendor provided service to interconnect geographically co-located Navy and Marine Corps LANs and BAN attached devices. The BAN service must address the specific mission requirements of each site, with regard to security, functionality, classification, performance, interoperability, and network management. The LAN service must address the specific mission requirements of the user organization, with regard to security, functionality, classification, performance, interoperability, and network management.			
Applicable Service Delivery Points: For BANs, NMCI Infrastructure, Organizations, NMCI OP Center, Pierside SDP, Fleet Teleports, Non-DON organizations; For LANs, Data/Voice/Video Seats, Organization			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: Availability of connectivity between Navy and Marine Corps LANs, BANs and attached devices. The BAN measurement will be an aggregate and average by site of BAN outage time. End-to-end BAN availability is calculated as the percentage of time that the BAN network is capable of accepting and delivering NMCI application data to the total time in the measurement period. It is measured end-to-end, from BAN demarcation to the LAN point of presence. The LAN measurement will be an aggregate and average by site of all LAN end points (server) and LAN outage time. The calculation for end-to-end BAN availability for a given month is as follows: (24 hours X days in month X # of BAN end points – Sum of the BAN end point outage times) / 24 hours X days in month X # of BAN end points. The calculation for LAN availability is same. Computation excludes scheduled, pre-agreed outages.			
Who: Vendor		Frequency: Continuous monitoring, 24 hour averaging, w/ reports monthly	
Where: BAN/LAN Service Delivery Points		How measured: Random sampling can be performed on number of BAN/LAN end points and time periods as specified by the Government. Aggregate performance of BANs; random sampling of LANs, the latter to include all Mission Critical networks. The BAN number appears first, the LAN number second.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	.999 / .999	.999 / .999	.999 / .999
Level of Service (2)	.999 / .999	.999 / .999	.999 / .999
Level of Service (3)	.9999 / .9999	.9999 / .9999	.9999 / .9999
Performance Category 2: Latency			
Performance Measure Description: Packet latency across the BAN/LAN. Calculated across BAN/LAN demarcation points. The measurement will be an aggregate and average by site of all packet latencies across the BANs/LANs within NMCI. An acceptable management protocol(s) will be used to perform the measurement from the NOC.			
Who: Vendor		Frequency: Measured every 5 minutes, reported monthly	
Where: SDP		How measured: Acceptable measurement protocol measured round trip time to multiple sites throughout the day.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	10 ms	10 ms	10 ms

Level of Service (2)	10 ms	10 ms	10 ms
Level of Service (3)	10 ms	10 ms	10 ms
Performance Category 3: Percent Bandwidth Utilization on Shared Network Segments			
Performance Measure Description: Average utilization during the peak hour of the network compared with available, useable capacity. The calculation will be under normal operations, at times of surges the utilization will exceed these values.			
Who: Third party		Frequency: Monthly surge capacity check	
Where: Across BAN/LAN demarcation points		How measured: Interface utilization statistics and Stress test.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.4	0.4	0.4
Level of Service (2)	0.4	0.4	0.4
Level of Service (3)	0.3	0.3	0.3
Performance Category 4: Problem Resolution			
Performance Measure Description: Elapsed time from the outage until the service is restored to normal operating performance. The measurement will be an aggregate and average by site of the time to restore from trouble tickets at the Help Desk. The metrics indicated represent total time to restore from time of non-availability (includes response time). Mission critical should be failover / dual homed to redundant path and redundancy should be restored as indicated. Failover to a device, within a device, or use of alternative paths having redundancy capabilities are means to satisfy the time to restore requirement.			
Who: Vendor		Frequency: Continuous monitoring, monthly reported	
Where: NMCI-wide		How measured: Event logs, first B value metric is response time, and second value is time to restore. In case of LOS (3) values, the second number is time to restore redundancy.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	30 minutes / 3hours	30 minutes / 3hours	30 minutes / 3hours
Level of Service (2)	15 minutes / 1 hour	15 minutes / 1 hour	15 minutes / 1 hour
Level of Service (3)	3 minutes / 30 minutes	3 minutes / 30 minutes	3 minutes / 30 minutes
Performance Category 5: Interoperability			
Performance Measure Description: For NMCI BANs and LANs, the interoperability requirement is focused on the segments within each Navy and Marine Corps base. This performance measure also addresses non-DON activities located on DON bases that must be supported by NMCI for connectivity only. The measure of BAN/LAN interoperability is particularly important during the initial NMCI lay down where DON is operating with multiple BAN/LAN configurations (legacy and NMCI). Interoperability will be measured by user agents located at the Bases. The user agents will employ scripts (e.g.: IP, Windows, DOS, UNIX) to demonstrate OSI layer 1-4 interoperability. This measure will be performed upon installation, three (3) times daily, when a configuration change is detected or implemented NMCI. The indicated frequency of measure will be escalated in response to end user interoperability feedback, help desk trouble ticket numbers that exceed threshold, or by the detection of anomaly. The establishment of a threshold will be mutually set by data collection over time. Reporting of threshold events and required escalation is performed according to ISF procedures. Notification of the Government is required for event severity established by the DON; the timeliness of reporting is stipulated in the Level of Service metric. BAN/LAN interoperability is defined here as the ability to establish and maintain network connectivity			

and exchange useful and effective information within any a base and its supported LANs, regardless of whether these are NMCI LANs or other LANs for which NMCI must provide connectivity. BAN/LAN interoperability testing will consist of (1) performance testing and (2) by end user incident reporting at the desktop.

-The performance testing is end-to-end testing between clients, as measured by latency between the two clients. (This testing will be performed, as determined by the contractor, as part of the required latency testing under SLA 24-2.) The definition of a failure is exceeding the Government and ISF agreed upon baseline values for latency for BAN/LAN.

- Interoperability measurement will also be performed by the submission by users of Help Desk Interoperability Trouble Tickets, to include non-NMCI users (connectivity only). The definition of BAN/LAN interoperability failure is exceeding the DON and ISF determined Help Desk reporting threshold value for BAN/LAN interoperability trouble tickets referring to a base or specific LAN over a 12 hour period.

BAN/LAN will be measured three (3) times daily; additional measurements as appropriate to ensure Joint Partner interoperability. Notification of the Government is required for Intranet interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor		Frequency: Measured three (3) times daily for performance; continuously for Help Desk. Reported monthly.	
Where: Measured from a NMCI user to another NMCI user at an NMCI base (if non-NMCI users supported at base, this will be a test point). Test points will be identified in the NMCI Interoperability Test Plan. Help Desk data will be captured from interoperability trouble reports.		How measured: (1) Contractor determined testing for performance, and (2) End User Incident Reports to Interoperability Help Desk. Collection and analysis granularity will be by organization, site, claimant/command for both.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three (3) hours
Level of Service (2)			N/A
Level of Service (3)			Notification within one (1) hour
Performance Category 6: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Performance evaluation by technical Government representative at every area/site.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	N/A	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Movable VTC Seat			**SLA: 26**
Service Description: Vendor service providing users with audiovisual equipment that allows users access to selected VTC services offering mobility and easy relocation. Includes both unclassified and optional classified VTC capabilities. User can initiate and participate in live VTC conferences. Movable VTC seats include infrastructure and required services to provide movable video teleconference connectivity within and external to NMCI.			
Applicable Service Delivery Points: Specified Government site/facility			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: Represents the VTC hardware, software, and supporting infrastructure being up and capable of allowing the end user to gain access and participate in VTC conferencing. Formula is: (# of hours in month X # of VTC units - VTC outage time in hours) / number of hours in month X number of VTCs. The outage time includes unscheduled hardware and related outages. Exception is scheduled pre-agreed outage. The VTC is considered to be up (or available) unless there is a trouble ticket at the Help Desk.			
Who: Contractor		Frequency: At implementation and yearly	
Where: VTC sites		How measured: Measured at the audiovisual device and, as determined by inspection, provides broadcast quality service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.995	0.995
Level of Service (2)		0.995	0.995
Level of Service (3)		0.997	0.997
Performance Category 2: Video Quality			
Performance Measure Description: Video and audio quality can be described as the absence of distortion, tiling, and latency. The quality of the video and audio is limited by provided bandwidth; therefore, both bandwidth and frames per second are expressed. Service levels for movable VTC are unique; they include 3 levels: basic, business, and premium. The basic 128 Kbps level will support a minimum of 15 frames per second, this is considered a minimum quality basic service; the business 384 Kbps/30 fps and premium 768/30 fps are two separate levels of high end service. These measures do not describe a technology solution but are intended to describe a quality of service, and are expected to change over time.			
Who: Contractor		Frequency: At acceptance and yearly	
Where: VTC sites		How measured: A frame rate tape, or other equivalent measure, will be used to verify frames per second.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		128 Kbps/15 fps	128 Kbps/15 fps
Level of Service (2a)	-	384 Kbps/30 fps	384 Kbps/30 fps
Level of Service (2b)	-	768 Kbps/30 fps	768 Kbps/30 fps
Performance Category 3: Gateway Capacity			
Performance Measure Description: The NMCI VTC architecture must have sufficient gateways to support all on line VTC users. Gateways should be provided for connectivity between dissimilar algorithms (H.320 and H.323), dissimilar bandwidth speeds, into closed proprietary networks (e.g., DVSG, FTS2000/2001, and DSN), and between bonded and 2X64 calls. The measurement is a ratio of the number of available gateways divided by the number of required gateway.			

Who: Contractor		Frequency: Measured continuously and reported monthly.	
Where: VTC sites		How measured: Tracked by scheduling and management software, and supplemented by users calls to Help Desk to report non-availability.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.95	0.95
Level of Service (2)		0.95	0.95
Level of Service (3)		0.99	0.99
Performance Category 4: Multi-Point Capacity			
Performance Measure Description: Availability of Multipoint Control Unit (MCU) provides the entire network with the capability to perform multipoint conferences. The number of required MCU ports is dependent on the number of NMCI customers. The contractor must monitor the usage and increase port capacity to support new users. The measure of performance is the number of successful attempts to use the MCU divided by the number of attempts.			
Who: Contractor		Frequency: Measured continuously and reported monthly	
Where: VTC sites		How measured: Video and audio quality, as determined by inspection, should be of broadcast quality.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.85	0.85
Level of Service (2)		0.85	0.85
Level of Service (3)		0.95	0.95
Performance Category 5: Reliability of Session Initiation			
Performance Measure Description: A fully successful conference is one that comes up on first dialing attempt and remains up with no loss in connectivity for the duration of the VTC, regardless of manual or automated conference initiation. Includes end-to-end internal to NMCI. Excludes any external conferences involving sites not on the NMCI network. First metric reflects percentage of time conference initiated on first called; second metric reflects percentage completed with intervention from the Help Desk			
Who: Contractor		Frequency: Measured continuously, reported monthly.	
Where: VTC sites		How measured: Video conference logs derived from automatic scheduling system; supplemented by user reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.85 / 0.95	0.85 / 0.95
Level of Service (2)		0.85 / 0.95	0.85 / 0.95
Level of Service (3)		0.95 / 0.99	0.95 / 0.99
Performance Category 6: Interoperability			
Performance Measure Description: For Movable VTC, the interoperability requirement is for NMCI users to interface with and exchange video/audio data with other DON users, DoD/Joint mission partners, and commercial (Major Acquisition) partners. VTC services within NMCI will be based on the H.323 protocol but must be backward compatible with H.320 and analog legacy services. IP Video will use the same transmission medium as voice and data and should have a network jitter of less than 150 ms and latency less than 100 ms for optimal interoperability and performance. Moreover, NMCI will support both 15 and 30 frames per second video, as well as IP Multicast. IP video requires			

effective measures of interoperability. Movable VTC interoperability will be measured by multiple methods: by end user incident reporting at the desktop, and by user agents located within NMCI and at external locations served by other non-NMCI networks. The validation of Movable VTC interactions may be performed by using appropriate video scripts, manual intervention, or other equivalent methodology. The measurement will include: interaction with a Navy and/or Marine Corps system, a DoD/Joint system located outside NMCI, and a commercial system, with a user combination of H.323 and H.320 based systems. VTC interoperability is defined here as the ability to establish and maintain and exchange useful and effective video and audio between any two NMCI clients regardless of WAN provider. Interoperability will be measured in multiple ways: (1) proof of interoperability, (2) performance testing, and (3) Help Desk Interoperability Trouble Tickets.

- The proof of interoperability is establishing and maintaining connection for the purpose of transferring VTC between the test clients. This will be demonstrated by successful execution of scripts, or equivalent testing. The performance testing is end-to-end testing between clients, as measured by latency between the two clients. The definition of a failure is two consecutive unsuccessful executions of the test script between test clients.

- Performance testing is an end-to-end testing between two video clients (or equivalent configurations). Performance is measured by round-trip transaction latency. The definition of failure is exceeding the Government and ISF agreed upon baseline values for latency (as supporting VTC).

- Interoperability measurement for VTC will also be performed by submission by users of Help Desk Interoperability Trouble Tickets. The definition of interoperability failure is exceeding the Government and ISF agreed upon Help Desk reporting threshold value.

Events at which Movable VTC will be measured: at installation and three (3) times daily; additional measurements as appropriate to ensure interoperability.

Coordination for establishment of the Joint/DoD site constellation is the responsibility of the Government. Notification of the Government is required for VTC interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor	Frequency: Measured three (3) times daily for user agents; continuous for Help Desk. Reported monthly.
Where: Measured from an NMCI video test configuration operated at an NMCI NOC test installation to another test station operated at a DoD/Joint and Commercial site. Test points will be identified in the NMCI Interoperability Test Plan.	How measured: (1) Application scripts via remote agent and (2) End User Incident Reports to Interoperability Help Desk. Collection and analysis granularity will be test site for script-based tests and by organization, site, claimant/command for trouble ticket based reports.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within 1 working day
Level of Service (2)			N/A
Level of Service (3)			Notification within three (3) hours

Performance Category 7: Customer Satisfaction
Performance Measure Description: Level of customer satisfaction.

Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Proxy and Caching Service			**SLA: 26A**
Service Description: Vendor service providing users the capability for caching and proxy to enhance Internet access and performance. Measures success in enhancing access to both external and internal web content.			
Applicable Service Delivery Points: Each DON facility			
Levels of Services: 1: (Enterprise)			
Performance Category 1: Availability			
Performance Measure Description: Proxy server availability is defined as the portion of time that contractor-provided proxy servers is available or 'up' for customer access. Availability is measured in terms of percentage of available time in a month. Formula is: (# of hours in Month - proxy server outage time in hours) / number of hours in Month. The outage time includes all unscheduled proxy server outages.			
Who: Contractor		Frequency: Measured daily and reported monthly.	
Where: NMCI Internet proxy servers		How measured: Monitors Proxy server and report % availability by individual server. Data audited by Government or designated third party.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.995	0.995
Level of Service (2)		0.995	0.995
Level of Service (3)		0.997	0.997
Performance Category 2: Average Hit Ratio			
Performance Measure Description: Hit ratio is the percentage of http requests successfully fulfilled by the cache. Average hit ratio of the Internet proxy caches is averaged over time by site.			
Who: Contractor		Frequency: Measured daily and reported monthly.	
Where: NMCI Internet proxy servers		How measured: Proxy server access logs are used to calculate hit ratios.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.40	0.40
Performance Category 4: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)		0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)		0.85 satisfactory rating	0.85 satisfactory rating

Service Name: External Networks			**SLA: 27**
Service Description: Access and interface to networks external to NMCI; includes required security and access control.			
Applicable Service Delivery Points: Applicable workstations			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: The measurement is an aggregate availability of all portals to external networks (non-NMCI). The contractor is not responsible for problems attributed to the external side of the NMCI demarcation interface. Scheduled pre-agreed outages are excluded from availability calculations. Aggregated and reported by site.			
Who: Vendor		Frequency: Measured continuously, summarized daily, reported monthly	
Where: Measured as NMCI being available at NMCI demarcation point		How measured: Number of hours up divided by total hours	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.995	0.995	0.995
Level of Service (3)	0.995	0.998	0.998
Performance Category 2: Implementation Time			
Performance Measure Description: Turnaround time between user request and implementation of access. The indicated implementation times apply where circuits (media and components) have been physically installed; where circuits do not exist, these category metrics are not applicable and implementation times are negotiated as part of the separately priced effort to obtain external network service. The measure is an aggregate and average by site for the turn around time to provide the user access to external networks.			
Who:		Frequency: Monthly average	
Where:		How measured: Log time between request and implementation. Days are in normal business days.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< 6 working days	< 6 working days	< 6 working days
Level of Service (2)	< 3 working days	< 3 working days	< 3 working days
Level of Service (3)	< 24 hours	< 24 hours	< 24 hours
Performance Category 3: Percent Bandwidth Used			
Performance Measure Description: Average utilization compared with available, useable capacity. The measure is performed at the demarcation to the external network. The contractor is not responsible for the bandwidth on the external side of the interface (non-NMCI network). The sampling period should be of a sufficient duration (e.g., 5 minutes) and performed during the 3 busiest hours of the workday, and on representative workdays.			
Who: Third party		Frequency: Monthly surge capacity check	
Where: SDP to SDP		How measured: Interface utilization statistics and Stress test.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.4	0.4	0.4
Level of Service (2)	0.4	0.4	0.4
Level of Service (3)	0.3	0.3	0.3

Performance Category 4: Problem Resolution			
Performance Measure Description: The measurement is an aggregate and average by site of the time to restore from trouble tickets at the Help Desk. Elapsed time from the outage until the service is restored to normal operating performance. Mission critical should have fail-over to redundant path and redundancy should be restored as indicated. Failover to a device, within a device, or use of alternative paths having redundancy capabilities will satisfy the time to restore redundancy.			
Who: Vendor		Frequency: Continuous monitoring, monthly reported	
Where: NMCI-wide		How measured: Event logs, first B value metric is response time, and second value is time to restore.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	1 hour / 3 hours	1 hour / 3 hours	1 hour / 3 hours
	1 hour / 3 hours	1 hour / 3 hours	1 hour / 3 hours
Level of Service (2)	15 minutes / 1 hour	15 minutes / 1 hour	15 minutes / 1 hour

Performance Category 5: Interoperability

Performance Measure Description: For External Network Access, the interoperability requirement is focused on the segments between NMCI bases and other DON enclaves (IT-21, MCTN) and between NMCI bases and external commercial (Major Acquisition) partners (connected via dedicated services, other than Internet). The requirement is bi-directional. The measure of External Network interoperability is particularly important because it represents the data transport between NMCI users and the operational Navy and Marine Corps, overseas units, and major commercial partners. Interoperability will be measured in multiple ways:

For IT-21 and MCTN

- by employing scripts (e.g.: IP, Windows, DOS) to demonstrate OSI layer 1-4 interoperability. External network interoperability is defined here as the ability to establish and maintain network connectivity and exchange useful and effective information from any NMCI client to any IT-21/MCTN partner located outside of NMCI and accessed by an External Network. The proof of interoperability is establishing and maintaining connection for the purpose of transferring information between the test clients. This will be demonstrated by successful execution of IP based script, or equivalent testing. The performance testing is end-to-end testing between clients, as measured by latency between the two clients. The definition of a failure is (1) two consecutive unsuccessful executions of the test script between test clients or (2) exceeding the Government and ISF agreed upon baseline values for latency. This measure will be performed upon installation, three (3) times daily; additional measurements as appropriate to ensure interoperability. Coordination for establishment of the IT-21/MCTN site constellation is the responsibility of the Government.

- by submission by users of Help Desk Interoperability Trouble Tickets. The definition of IT-21/MCTN External Network interoperability failure: exceeding the Help Desk reporting threshold values of either 10 interoperability trouble tickets referring to IT-21 or 10 interoperability trouble tickets referring to MCTN domains over a 12 hour period.

For Major Acquisition Partners

- by the submission by users of Help Desk Interoperability Trouble Tickets. The definition of

Commercial External Network interoperability failure: exceeding the Help Desk reporting threshold value of 10 Commercial Partner interoperability trouble tickets referring to a single domain (i.e., Commercial) over a 12 hour period. Notification of the Government is required for External Network interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.			
Who: Contractor		Frequency: Measured three (3) times daily for user agents; continuous for Help Desk. Reported monthly.	
Where: IT-21/MCTN: Measured from an NMCI user agent operated from a NOC test installation. Test points will be identified in the NMCI Interoperability Test Plan but will include both NMCI and External Network sites. Commercial: Help Desk data will be captured from interoperability trouble reports.		How measured: (1) IP based scripts via remote agent and (2) End User Interoperability Incident Reports to the Help Desk. Collection and analysis granularity will be by organization (domains). For script-based tests and by organization, site, claimant/command for trouble ticket based reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three (3) hours of failure
Level of Service (2)			N/A
Level of Service (3)			Notification within one (1) hour of failure
Performance Category 6: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)	0.85 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)	0.90 satisfactory rating	0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Network Management Service -- Asset Management **SLA: 28**			
Service Description: Vendor will make available near real-time information feeds to support Government oversight, maintain accessible historical data, and provide summary management reports on the operations support functions of Asset Management. This service includes Automated Inventory Management of various types of NMCI assets such as -- seat in-service, installed applications servers etc., deployment and removal of new assets, and management reports detailing and summarizing status, trends and recommended action on these assets.			
Applicable Service Delivery Points: NMCI Infrastructure, Organization, NMCI OP Center, and Fleet Tele-ports.			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Time to Implement Asset			
Performance Measure Description: Time to install a new NMCI domain asset following agreement to install. This measure addresses the delivery and installation of the asset as reflected by data provided in the format and media prescribed by the Government. Clock starts at final scheduled implementation date as agreed to by ISF and Local Commander/CTR per the Task Order.			
Who: Vendor		Frequency: As requested by Government	
Where: NMCI infrastructure or sites		How measured: Service request and completion dates	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< = 5 days, 92% of time	< = 5 days, 92% of time	< = 5 days, 92% of time
Level of Service (2)	< = 5 days, 92% of time	< = 5 days, 92% of time	< = 5 days, 92% of time
Level of Service (3)	< = 5 days, 92% of time	< = 5 days, 92% of time	< = 5 days, 92% of time
Performance Category 1A: Time to Implement Asset for **Remote Users Only** (CLIN 0001AE and 0101AE if the Option is exercised)			
Performance Measure Description: Time to install a new NMCI domain asset following agreement to install. This measure addresses the delivery and installation of the asset as reflected by data provided in the format and media prescribed by the Government. Clock starts at final scheduled implementation date as agreed to by ISF and Local Commander/CTR per the Task Order.			
Who: Vendor		Frequency: As requested by Government	
Where: NMCI infrastructure or sites		How measured: Service request and completion dates	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< = 5 days, 85% of time	< = 5 days, 85% of time	< = 5 days, 85% of time
Level of Service (2)	< = 5 days, 85% of time	< = 5 days, 85% of time	< = 5 days, 85% of time
Level of Service (3)	< = 5 days, 92% of time	< = 5 days, 92% of time	< = 5 days, 92% of time
Performance Category 2: Time to Remove Asset			
Performance Measure Description: Time to remove existing asset following agreement to remove. Clock starts at final scheduled implementation date as agreed to by ISF and Local Commander/CTR per the Task Order.			
Who: Vendor		Frequency: As requested by Government	
Where: NMCI infrastructure or sites		How measured: Service request and completion dates	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< 15 days	< 15 days	< 15 days
Level of Service (2)	< 15 days	< 15 days	< 15 days
Level of Service (3)	< 15 days	< 15 days	< 15 days

Performance Category 2A: Time to Remove Asset for **Remote Users Only** (CLIN 0001AE and 0101AE if the Option is exercised)			
Performance Measure Description: Time to remove existing asset following agreement to remove. Clock starts at final scheduled implementation date as agreed to by ISF and Local Commander/CTR per the Task Order.			
Who: Vendor		Frequency: As requested by Government	
Where: NMCI infrastructure or sites		How measured: Service request and completion dates	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< 15 days	< 25 days	< 25 days
Level of Service (2)	< 15 days	< 20 days	< 20 days
Level of Service (3)	< 15 days	< 15 days	< 15 days
Performance Category 3: Accuracy of Asset Inventory			
Performance Measure Description: Measure will be accuracy of inventory and mapped network components per a schematic that includes asset number, product description, location code and software/hardware confirmation on each machine. The asset inventory accuracy requires that no NMCI inventory items be added, deleted, or moved without explicit coordination and involvement of the NMCI contractor; the contractor is responsible for developing and promulgating a DON-wide process that supports this discipline. This performance measure calculation excludes any violations of this rule by other than NMCI contractor personnel.			
Who: Vendor		Frequency: Quarterly reports	
Where: NMCI infrastructure or sites		How measured: Evaluated and audited by a third party. Auditing will be performed via statistically significant sampling at a government determined confidence level that will be greater than or equal to 85%. For auditing purposes, number of seats used by vendor for billing will be compared with the number of average active seats in the asset database.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.98	0.995	0.995
Level of Service (2)	0.98	0.995	0.995
Level of Service (3)	0.98	0.995	0.995

Service Name: Operational Support Services			**SLA: 29**
Service Description: Vendor provided indirect services that include, but are not limited to, Data Backups and Recovery, Data Archiving, Routine Database Audits and Maintenance, Log Retrieval and Audits, Purging of Records, Network Address Administration, and Domain Name Server (internal). Vendor will: make information reports, to support Government oversight, available on recurring basis to appropriate government entities, maintain accessible historical data, and provide summary management reports that detail the OSS functions.			
Applicable Service Delivery Points: Infrastructure			
Levels of Services: 1: (Enterprise)			
Performance Category 1: Quality & Timeliness of Reports			
Performance Measure Description: Operational Support Services (OSS) shall provide a monthly roll-up of all reports into a plain-English situational report. This measures the quality of services and timeliness of the OSS reports. The measure of OSS reports is the percentage received on time with accurate data.			
Who: Vendor		Frequency: Measure daily, summarized and reported weekly	
Where: Operations Center		How measured: Surveys and IVV rating.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	100%	100%	100%
Performance Category 2: Data Backup/Archiving & Recovery Effectiveness			
Performance Measure Description: Data back up frequencies and data retention periods are specified for DON (paragraph 3.1.22 of the SOO (Retention of DON Electronic Records)). An audit will verify that these requirements are being met. A data recovery requests by an NMCI end user must be qualified as recoverable via backup or archived media. Data deleted by an end user prior to the data being backed up is considered non-retrievable for reporting purposes. Vendor includes this data as a monthly report to the Government, and by audit.			
Who: Vendor		Frequency: Per audit	
Where: Operations Center		How measured: This measurement is the number of successful back ups performed divided by the number of back ups scheduled.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.999	0.999	0.999
Performance Category 3: Database Audits and Maintenance Effectiveness			
Performance Measure Description: Performance of scheduled database archiving and maintenance by vendor as specified in the contract will be audited for effective performance. Excludes devices not in service. Vendor includes this data in monthly reports to the Government, and by audit.			
Who: Vendor		Frequency: Annual	
Where: Operations Center		How measured: This measurement is the number of successful back ups performed divided by the number of back ups scheduled.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.999	0.999	0.999

Performance Category 4: Disaster Recovery Plan Effectiveness			
Performance Measure Description: Within one month of contract, the contractor will submit for Government review the Disaster Recovery Plan for NMCI. The plan, at a minimum, will demonstrate the contractor's ability to recover a critical application at a remote site. Down time will not exceed 16 hours for basic and high end, and 8 hours for mission critical. Metric is percent compliance for submission of the Recovery Plan.			
Who: Vendor		Frequency: Initially and annually	
Where: Operations Center		How measured: Vendor demonstration to Government.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	100%	100%	100%

Service Name: Capacity Planning **SLA: 30**

Service Description: Vendor provided modeling to plan changes to the NMCI infrastructure, specifically to estimate future volume, usage, and applications characteristics, as well as integration of emerging technology. It covers every component of NMCI (voice, video, and data). It includes periodic analysis of network capacity and recommendations for future engineering changes, for Government review and approval. Capacity Planning services will:

- Use information from network management tools for modeling the NMCI.
- Use workload forecasts, including the surge requirements from two Major Regional Conflicts (MRC), to produce estimates of IT infrastructure requirements to meet service objectives.
- Generate forecasting scenarios (simulations) to plan for meeting service level objectives.
- Use capacity planning methodology to forecast the performance of an active or a proposed system.
- Create a "baseline" of the existing environment that reflects the performance of the infrastructure.
- Use capacity planning information to: estimate future workload growth/change, forecast the likely use of hardware resources as workload varies, forecast expected performance and throughput levels for that system, and project workload requirements and translate them into demands for IT resources.
- Use information from network management tools to do ad-hoc capacity planning as needed due to unexpected or unplanned hardware, workload growth/change to forecast expected performance and throughput levels for those instances.

Applicable Service Delivery Points: NMCI Operation Center

Levels of Service: 1 (Enterprise)

Performance Category 1: Quality of Planning

Performance Measure Description: The vendor's ability to deliver satisfactory reports that perform capacity planning based on assessment of processes, including trend analysis, requirements assessment, timeliness of assess, technology insertion and other relevant measures. Satisfactory is defined as the "usable" and supported by technology for implementation.

Who: Third party	Frequency: Annually
Where: Operations center	How measured: Percentage of reports judged to be satisfactory by third party assessment; computed as: (total # of reports - unsatisfactory reports) / total # of reports

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	100%	100%	100%

Performance Category 2: Availability and Timeliness of Reports.			
Performance Measure Description: The vendor's ability to provide a capacity planning baseline, monthly reports, recommend changes based on capacity planning to improve the NMCI, and plans for upgrade due to changes in the way business is being done. This shall cover the NMCI end user to end user. The measure is: (total # of reports - late or incomplete reports received) / total # of reports. The schedule for capacity planning reports will be agreed in the NMCI contract.			
Who: Vendor		Frequency: Monthly reports until baseline established then quarterly reports using 3, 6, and 12 months of historical measured, functional, and war plans requirements data for re-baselining the NMCI model.	
Where: All points between end users to include end users		How measured: This shall be measured by timeliness of the required capacity planning reports.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	100%	100%	100%
Performance Category 3: Report Integrity			
Performance Measure Description: Network performance data. The measure is: (total # of reports - late or incomplete reports received) / total # of reports. The schedule for network performance reporting will be agreed in the NMCI contract.			
Who: Third party		Frequency: Monthly network performance data, including actual and functional shall be gathered according to requirements for the model.	
Where: All points between end users to include end users		How measured: By traffic on the NMCI end to end.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	100%	100%	100%

Service Name: System Services -- Domain Name Server			**SLA: 31**
Service Description: DNS is the service that translates domain names to IP addresses and vice versa. A domain name is a mechanism that gives unique names to network devices. Vendor solution must meet all functionality of the current DNS service, to include flexible support for deployed units. This service includes Internal Primary and Secondary DNS Servers, and External Primary and Secondary DNS Servers.			
Applicable Service Delivery Points: NMCI Infrastructure, Organizations, NMCI OP Center, and Fleet Teleports.			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: DNS Service Availability measured as an aggregate and the average for Primary and Secondary DNS Service Availability reported monthly. The higher mission critical metric represents a higher break fix requirement and more responsive time to repair.			
Who: Vendor		Frequency: Primary DNS - every 2-5 minutes. Secondary DNS - every 10-15 minutes	
Where: All DNS Servers		How measured: Continuous monitoring of DNS Servers by DNS Monitors and SNMP database	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	> = .997	> = .997	> = .997
Level of Service (2)	> = .997	> = .997	> = .997
Level of Service (3)	> = .998	> = .998	> = .998
Performance Category 2: Latency			
Performance Measure Description: The measurement is a monthly aggregate and average by site of Address Resolution Time and reflects the time for NMCI end users to use their local DNS servers. Address Resolution Time includes applications only, and does not include network response time. Address Resolution Time for names/addresses that are not resident on the DNS Servers are not considered failures.			
Who: Vendor		Frequency: Primary DNS - Every 2-5 minutes. Secondary DNS - Every 10-15 minutes	
Where: All DNS servers		How measured: Continuous monitoring of DNS Servers by DNS Monitors and SNMP database	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< 1 sec	< 100 ms	< 100 ms
Level of Service (2)	< 100 ms	< 10 ms	< 10 ms
Level of Service (3)	< 10 ms	< 10 ms	< 10 ms
Performance Category 3: Deleted			
Performance Category 4: Periodic Verification of Statistical Sample of DNS Table Entries			
Performance Measure Description: SLA measures percentage of time that reports are received and accurate. This report is a monthly aggregate and average by DNS of the rate of successful DNS requests per day. These measurements are reported for trending and capacity planning purposes.			
Who: Vendor		Frequency: Average successful queries/total queries over 15 minutes	
Where: All DNS servers		How measured: DNS Monitors and SNMP database	

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.999	100.0%	100.0%

Service Name: Application Server Connectivity			**SLA: 32**
Service Description: Vendor provided optional service where Navy and Marine Corps organizational/operational/functional application servers are provided connectivity to the NMCI. Includes connectivity and bandwidth required to support mission requirements. (Must meet peak network loading requirements of users and replication. Does not include server and database maintenance and administration, i.e. hosting.).			
Applicable Service Delivery Points: Selected Government Application Servers			
Levels of Services: 2: (Standard, Mission Critical)			
Performance Category 1: Availability			
Performance Measure Description: Availability of contracted NMCI network bandwidth from local supporting backbone to connected application server. Reported by primary supported organization and by server.			
Who: Vendor		Frequency: Measured continuously, summarized daily, and reported monthly.	
Where: At the network segment connecting application server to local supporting backbone.		How measured: Measured by combination of network management tools and help desk. Calculation is total time of network connectivity divided by total time. Does not include pre-agreed scheduled outages or server hardware/software failure.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.995	0.995
Level of Service (2)	0.997	0.997	0.997
Performance Category 2: Implementation Time			
Performance Measure Description: Implementation time is measured as time between user request and the implementation of connectivity between network backbone and Application Server. The indicated implementation times apply where circuits (media and components) have been physically installed; where circuits do not exist, these category metrics are not applicable and implementation times are negotiated as part of the separately priced effort to obtain external network service.			
Who: Vendor		Frequency: Measured on a per event basis and summarized & reported monthly.	
Where: Specified network backbone and Applications Servers		How measured: As time between user request and the implementation of connectivity, from customer service completion records.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< 5 working days	< 5 working days	< 5 working days
Level of Service (2)	< 24 hours	< 24 hours	< 24 hours
Performance Category 3: MTTR Backbone to Server network segment			
Performance Measure Description: Mean Time to Repair the network segment between local supporting backbone and the application server. . Reported by primary supported organization and by server.			
Who: Vendor		Frequency: Monitored continuously, summarized & reported monthly.	

Where: At the network segment connecting application server to local supporting backbone.		How measured: Measures mean time for repair from the time fault was detected to the time it is fixed.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	< = 6 Hrs	< = 6 Hrs	< = 6 Hrs
Level of Service (2)	< = 2 Hrs	< = 2 Hrs	< = 2 Hrs
Performance Category 4: Network Loading			
Performance Measure Description: Measures average network loading as a percentage of the available bandwidth from the server to the local supporting backbone.			
Who: Vendor		Frequency: Monitored continuously, summarized hourly, and reported monthly.	
Where: At the network segment.		How measured: Network management software.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.40	0.40
Level of Service (2)		0.30	0.30

Service Name: Network Operations Display			**SLA: 32A**
Service Description: The Network Operations Display provides authorized mission critical users with a real-time status of the network assets allocated to them for mission support. The service includes the status of both classified and unclassified networks.			
Applicable Service Delivery Points: DON NMCI Managers			
Levels of Services: 1: (Enterprise)			
Performance Category 1: Availability			
Performance Measure Description: The measurement is an aggregate availability of the NMCI real-time performance and status information. The outage time excludes all pre-agreed scheduled hardware and related outages. The Network Operations Display is considered to be up (or available) unless there is a trouble ticket at the Help Desk.			
Who: Vendor		Frequency: Measured continuously, averaged weekly, reported monthly.	
Where: DON NMCI Manager Workstations		How measured: Number of hours up operational divided by total hours	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.995	0.995
Performance Category 2: Customer Satisfaction			
Performance Measure Description: Level of customer satisfaction.			
Who: Contractor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: NMCI Customers using service		How measured: Customer survey, random sampling of NMCI customers using this service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.85 satisfactory rating	0.85 satisfactory rating

Service Name: NMCI Security Operational Services – General **SLA: 33**

Service Description: Protection of the Information Systems (Infrastructure), Domains (Communities of interest), and Content (at rest, in-use and in-transit) to assure confidentiality, integrity, availability, authenticity, and non-repudiation. Provision of Security mechanisms, Procedures, controls and operation. Compliance with DoD certification and accreditation policies and procedures.

Applicable Service Delivery Points: All NMCI Voice, Video, and Data Service Delivery Points

Levels of Services: 3: (Basic, High End, Mission Critical)

Performance Category 1: Accreditation

Performance Measure Description: DITSCAP 5000.40 establishes accreditation requirements. Percentage of accreditation's that are successful on the first attempt. Attempts for accreditation will be ongoing throughout the year. This measure will be examined semi-annually. Interim accreditation received through interim authority to operate (IATO) is counted as a successful accreditation. Accreditations measured are the number of successfully accredited packages, not the number of packages submitted for accreditation. The B-value for accreditations attempted for the third time will be 100%.

Who: Vendor & Government	Frequency: Semi-annual
Where: DON-wide	How measured: Total number of successful accreditation's on first attempt divided by total number of adjudicated packages

	B Value		Pre-Negotiation	Contract SLA
Level of Service (1)	0.85		0.85	0.85
Level of Service (2)	0.85		0.85	0.85
Level of Service (3)	0.90		.90	.90

Performance Category 2: Security integrity-Third Party Physical Inspections

Performance Measure Description: Percentage of third party physical inspections passed. Applicable inspection sites are those sites that are either accredited or interim accredited. Inspection criteria to be developed based on current DoN physical security requirements for both unclassified and classified processing.

Who: Third party	Frequency: Annual
Where: DON-wide	How measured: Total number of physical inspections passed divided by total number of physical inspections

	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	0.95	0.99	0.95 / 0.99	0.95 / 0.99
Level of Service (2)	0.97	100%	0.97 / 100%	0.97 / 100%
Level of Service (3)	0.99	100%	0.99 / 100%	0.99 / 100%

Performance Category 3: Security integrity-Security Measures

Performance Measure Description: Percentage of violation of security measures. Inspection criteria will be based on network security guidance, orders, and compliance with applicable IAVAs, IAVBs, and NAVCIRT Advisories as well as other specific patches and policies as approved by the Government. Network hardware components and software applications will be inspected for compliance with directed security configurations. If a component has one or more security misconfigurations, it counts as one misconfiguration item and that translates to a violation. (For example, if a workstation does not have the required operating system patches or the latest virus signature updates, that constitutes one violation.) For the unclassified B-values, the requirement for this measure will be .001 beginning six months after the start of the transition period.

Who: Government Red team and Green team		Frequency: Periodic		
Where:		How measured: Total number of violations divided by total number components and applications measured.		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	0.002	0.001	0.002 / 0,001	0.002 / 0,001
Level of Service (2)	0.002	0.001	0.002 / 0.001	0.002 / 0.001
Level of Service (3)	0.002	0.00	0.002 / 0.00	0.002 / 0.00
Performance Category 4: Blocking of an Intrusion (user level)				
Performance Measure Description: Success rate in blocking Red Team intrusions. An intrusion represents unauthorized access to information on the network and represents the act, including scanning and probing for vulnerabilities, to gain unauthorized access. Successful blocking of an intrusion occurs when the action to gain unauthorized access fails or that particular vulnerability is found not to exist. This will be measured for user level access to an NMCI component.				
Who: Government Red team		Frequency: Periodic		
Where: DON-wide		How measured: (Total number of Red Team Intrusion attempts minus the number of successful Red Team intrusions) divided by the total number of Red team intrusions attempted.		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	0.99	0.9999	0.99 / 0.9999	0.99 / 0.9999
Level of Service (2)	0.99	0.9999	0.99 / 0.9999	0.99 / 0.9999
Level of Service (3)	0.999	100.00%	0.999 / 100.00%	0.999 / 100.00%
Performance Category 5: Blocking of an Intrusion (root level)				
Performance Measure Description: Success rate in blocking Red Team intrusion attacks. An intrusion represents unauthorized access to information on the network and represents the act, including scanning and probing for vulnerabilities, to gain unauthorized access. Successful blocking of an intrusion occurs when the action to gain unauthorized access fails or that particular vulnerability is found not to exist. This will be measured for root level access to an NMCI component.				
Who: Government Red team		Frequency: Periodic		
Where: DON-wide		How measured: (Total number of Red Team intrusion attempts minus the number of successful Red Team intrusions) divided by the total number of Red team intrusions attempted.		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	0.999	0.9999	0.999 / 0.99999	0.999 / 0.99999
Level of Service (2)	0.999	0.9999	0.999 / 0.99999	0.999 / 0.99999
Level of Service (3)	0.9999	100.00%	0.9999 / 100.00%	0.9999 / 100.00%
Performance Category 6: Blocking of a Denial of Service (DOS) attack				
Performance Measure Description: Success rate in blocking of DOS attacks. Criteria will be				

developed outlining the definition for successfully blocking a DOS attack. Successful blocking of a DOS attack occurs when Red Team attempts to measurably degrade the normal performance of network components (e.g., routers, servers and switches) fails. The number of DOS attacks used in this measurement will be provided by the Government Red Team. Attacks will be against currently certified configurations.				
Who: Government Red team		Frequency: Periodic		
Where: DON-wide		How measured: (Total number of Red Team intrusion attempts minus the number of successful Red Team intrusions) divided by the total number of Red team intrusions attempted.		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	0.999	0.9999	0.995 / 0.999	0.995 / 0.999
Level of Service (2)	0.999	0.9999	0.995 / 0.999	0.995 / 0.999
Level of Service (3)	0.9999	100.00%	0.999 / 100.00%	0.999 / 100.00%
Performance Category 7: Blocking of a data retrieval				
Performance Measure Description: Success rate in blocking Red Team data retrieval excluding root and user level intrusions. Criteria will be developed outlining definition of successfully blocking a date retrieval intrusion. The number of data retrieval attacks used in this measurement will be provided by the Government Red Team. Attacks will be against currently certified configurations.				
Who: Government Red team		Frequency: Periodic		
Where: DON-wide		How measured: (Total number of Red Team intrusion attempts minus the number of Red Team intrusions successfully blocked) divided by the total number of Red team intrusions attempted.		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	0.999	0.9999	0.999 / 0.9999	0.999 / 0.9999
Level of Service (2)	0.999	0.9999	0.999 / 0.9999	0.999 / 0.9999
Level of Service (3)	0.9999	100.00%	0.9999 / 100.00%	0.9999 / 100.00%
Performance Category 8: Blocking of a data integrity attack				
Performance Measure Description: Success rate in blocking Red Team data integrity attacks excluding root and user level intrusions. Criteria will be developed outlining definition of successfully blocking a date integrity attack. The number of data integrity attacks used in this measurement will be provided by the Government Red Team. Attacks will be against currently certified configurations.				
Who: Government Red team		Frequency: Periodic		
Where: DON-wide		How measured: (Total number of Red Team intrusion attempts minus the number of Red Team intrusions successfully blocked) divided by the total number of Red team intrusions attempted.		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	0.995	0.999	0.999 / 0.9999	0.999 / 0.9999
Level of Service (2)	0.995	0.999	0.999 / 0.9999	0.999 / 0.9999
Level of Service (3)	0.997	100%	0.9999 /100.0%	0.9999 /100.0%
Performance Category 9: Red Team Intrusion Attempts				
Performance Measure Description: Percentage of Red-Team intrusions detected from an authorized user trying to gain access beyond his/her permissions. The number of Red-Team				

intrusion attempts used in this measurement will be provided by the Government Red Team. Attacks will be against currently certified configurations.				
Who: Government Red team		Frequency: Periodic		
Where: DON-wide		How measured: (Total number of Red Team unauthorized security accesses minus the number of successful Red Team unauthorized security accesses (as an NMCI user) successfully detected) divided by the total number of Red Team unauthorized security accesses.		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	0.999	0.9999	0.995 / 0.999	0.995 / 0.999
Level of Service (2)	0.999	0.9999	0.995 / 0.999	0.995 / 0.999
Level of Service (3)	0.9999	100.00%	0.997 / 100.00%	0.997 / 100.00%

Service Name: Information Assurance Operational Services - PKI **SLA: 34**

Service Description: Protection of the Information Systems (Infrastructure), Domains (Communities of interest), and Content (at rest, in-use and in-transit) to assure confidentiality, integrity, availability, authenticity, and non-repudiation. Implementation of DoD PKI services for users for electronic mail.

Applicable Service Delivery Points: Fixed and Portable (Basic, High End, Mission Critical) Workstation, Embarkable Workstation, Embarkable Portable (Government and Contractor provided), Hybrid Seat

Levels of Services: 3: (Basic, High End, Mission Critical)

Performance Category 1: Certificate Revocation

Performance Measure Description: Timeliness of revoking a certificate when required.

Who: Vendor & Government	Frequency: Continuous by vendor, random by government
Where: Operations Center	How measured: Elapsed time from notification of the NMCI contractor that a user certificate needs to be revoked, to the notification of the certification authority

	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	1 hour	30 minutes	1 hour / 30 minutes	1 hour / 30 minutes
Level of Service (2)	1 hour	30 minutes	1 hour / 30 minutes	1 hour / 30 minutes
Level of Service (3)	1 hour	30 minutes	1 hour / 30 minutes	1 hour / 30 minutes

Performance Category 2: Ability of one NMCI user to obtain the DOD Public Key Infrastructure X.509 certificate of another NMCI user for purposes of sending electronic mail.

Performance Measure Description: Time required for users to successfully obtain on the first attempt the X.509 certificates from the NMCI Public Key Infrastructure. The percentage applied is the rate at which users successfully obtain the certificate within the specified time period.

Who: Vendor	Frequency: Monthly report
Where: Operations Center	How measured: The time it takes for users to successfully obtain X.509 certificates when attempted. The stipulated target time (and percentage) to obtain certificates varies by level of service and unclassified/classified.

	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	5 minutes, 99.7%	2 minutes, 99.9%	5 min, 99.7% / 2 min, 99.9%	5 min, 99.7% / 2 min, 99.9%
Level of Service (2)	5 minutes, 99.7%	2 minutes, 99.9%	5 min, 99.7% / 2 min, 99.9%	5 min, 99.7% / 2 min, 99.9%
Level of Service (3)	5 minutes, 99.7%	2 minutes, 99.9%	5 min, 99.7% / 2 min, 99.9%	5 min, 99.7% / 2 min, 99.9%

Performance Category 3: User registration for DOD Public Key Infrastructure within NMCI.

Performance Measure Description: Measures the time from the submission of a user request to establishing fully functional DOD PKI X.509 certificates. The calculation is the number achieved divided by the number requested within a specified time.

Who: Vendor	Frequency: Monthly report
Where: DON-wide	How measured: The time it takes from submission of a user request for a DOD PKI X.509 certificate to being fully functional using DOD PKI within NMCI.

	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	85% (1 week), 100% (2 week)	85% (1 week), 100% (2 week)	85% (1 wk), 100% (2 wk) / 85% (1 wk), 100% (2 wk)	85% (1 wk), 100% (2 wk) / 85% (1 wk), 100% (2 wk)
Level of Service (2)	85% (1 week), 100% (2 week)	85% (1 week), 100% (2 week)	85% (1 wk), 100% (2 wk) / 85% (1 wk), 100% (2 wk)	85% (1 wk), 100% (2 wk) / 85% (1 wk), 100% (2 wk)
Level of Service (3)	90% (3 days), 100% (1 week)	90% (3 days), 100% (1 week)	90% (3 days), 100% (1 wk) / 90% (3 days), 100% (1 wk)	90% (3 days), 100% (1 wk) / 90% (3 days), 100% (1 wk)

Performance Category 4: Interoperability

Performance Measure Description: For PKI, the interoperability requirement is to verify successful implementation of bi-directional PKI services from within NMCI to locations served by networks external to NMCI (with which it must interface). PKI services interoperability will be measured by two methods: by end user incident reporting, and by interoperability testing.

- Interoperability measurement will be performed by the submission by users of Help Desk Interoperability Trouble Tickets. The definition of PKI interoperability failure is exceeding the Help Desk reporting threshold value of 25 PKI interoperability trouble tickets over a 12 hour period; this reporting threshold value will be regularly reviewed by the Government and ISF.

- The proof of interoperability is establishing and maintaining connection for the purpose of transferring information between test clients both with DON (IT-21, MCTN) and with Joint/DoD. The validation of PKI services will be performed manually using DoD PKI certificates. The tests will include representation of all facets of the DON business operation and NMCI functions that depend on PKI. Proof of interoperability is defined by end-to-end testing between two test clients, and is defined by receiving an anticipated response. Failure equates to (2) two consecutive unsuccessful executions of a test with the same end test organizations, e.g., Marine Corps and Air Force.

Notification of the Government is required for PKI interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor	Frequency: Measured weekly for manual interoperability testing (until PKI stabilized); continuous for Help Desk. Reported monthly.
Where: Measured from an NMCI user (located at an NMCI workstation) to an equivalent client configuration operated at a location external to NMCI. Test points will be identified in the NMCI Interoperability Test Plan but will include NMCI and DoD/Joint.	How measured: (1) End User Incident Reports to Help Desk, and (2) Manual intervention at internal NMCI user locations and external user locations.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within six (6) hours
Level of Service (2)			N/A
Level of Service (3)			Notification within three (3) hours

Service Name: Information Assurance Operational Services - SIPRNET Access **SLA: 35**

Service Description: Protection of the Information Systems (Infrastructure), Domains (Communities of interest), and Content (at rest, in-use and in-transit) to assure confidentiality, integrity, availability, authenticity, and non-repudiation. Provide SIPRNET access to users in accordance with DoD and DON policies and procedures.

Applicable Service Delivery Points: Classified Connectivity Upgrade Option

Levels of Services: 3: (Basic, High End, Mission Critical)

Performance Category 1: SIPRNET Access Availability

Performance Measure Description: Availability of connectivity at SIPRNET portal. Measured from the NMCI end user to the last NMCI controlled access point to the SIPRNET. Excludes any outages beyond the control of NMCI. Assumed that the availability of the access point to the SIPRnet cannot be greater than the availability of the NMCI MAN/BAN/LAN to the point of entry to external networks.

Who: Vendor		Frequency: Measured continuously, summarized hourly, reported daily		
Where: Access Point of Entry for SIPRNET		How measured: Measurements will be based on help desk trouble tickets reported by region/base/ organization. Calculation: Number of hours of service availability divided by the total number of hours.		
	B Value		Pre-Negotiation	Contract SLA
Level of Service (1)	0.98		0.98	0.98
Level of Service (2)	0.98		0.98	0.98
Level of Service (3)	0.996		0.996	0.996

Performance Category 2: SIPRNET Access Verification

Performance Measure Description: Number of un-authorized users who obtain successful access to SIPRNET services.

Who: Vendor & Government Red team		Frequency: Continuous by vendor, periodic by government		
Where: DON-wide		How measured: Number of successful unauthorized user accesses to SIPRNET services		
	B Value	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.00		0.00	0.00
Level of Service (2)	0.00		0.00	0.00
Level of Service (3)	0.00		0.00	0.00

Performance Category 3: Interoperability

Performance Measure Description: For SIPRNET Access, the interoperability requirement is focused on the segments between DON bases, Joint/DoD bases and other locations and agencies that have access to SIPRNET. The requirement is bi-directional. The measure of SIPRNET interoperability is particularly important because it represents the classified data transport between Navy and Marine Corps and the other Services, DoD/Joint, and other Agencies. Interoperability will be measured by user agents that will employ scripts (e.g.: IP, Windows, DOS) to demonstrate OSI layer 1-4 interoperability. SIPRNET interoperability is defined here as the ability to establish and maintain network connectivity and exchange useful and effective information from any NMCI clients to any DoD/Joint partner located outside of NMCI accessed by SIPRNET. SIPRNET interoperability testing

will consist of two basic tests: (1) proof of interoperability and (2) performance testing.

-The proof of interoperability is establishing and maintaining connection for the purpose of transferring information between the test clients. This will be demonstrated by successful execution of IP based script, or equivalent testing. The definition of a failure is two consecutive unsuccessful executions of the test script between test clients.

-The performance testing is end-to-end testing between clients, as measured by latency between the two clients. The definition of a failure is exceeding the Government and ISF agreed upon baseline values for latency.

These measures will be performed upon installation and three (3) times daily; additional measurements as appropriate to ensure interoperability. Coordination for establishment of the Joint/DoD site constellation is the responsibility of the Government. The user agents will employ IP based scripts to demonstrate OSI layer 1-4 interoperability.

Notification of the Government is required for SIPRNET interoperability failure as established by the DON (Navy CTF and MITNOC); the timeliness of reporting is stipulated in the Level of Service metric.

Who: Contractor	Frequency: Measured three (3) times daily user agents. Reported monthly.
Where: Measured from an NMCI workstation or an equivalent client configuration operated from a NOC test installation. Test points will be identified in the NMCI Interoperability Test Plan but will include both NMCI and DoD/Joint sites.	How measured: Remote agent locked down workstation test conducted to verify successful exchange of IP based scripts. Collection and analysis granularity will be by test sites.

	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)			Notification within three (3) hours of failure
Level of Service (2)			N/A
Level of Service (3)			Notification within one (1) hour of failure

Performance Category 4: Customer Satisfaction

Performance Measure Description: User satisfaction of latency of network apps, interoperability (reachability) to DON and DoD sites

Who: Vendor & Government Red team	Frequency: Continuous by vendor, periodic by government
Where: NMCI-wide	How measured: Based on customer satisfaction surveys.

	B Value	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)	0.85		0.85	0.85
Level of Service (2)	0.85		0.85	0.85
Level of Service (3)	0.90		0.85	0.85

Service Name: Information Assurance Planning Services				**SLA: 36**
Service Description: These security strategic services shall provide for the NMCI to enhance the confidentiality, integrity, availability, authenticity, and non-repudiation requirements. The contractor shall support the use of appropriate mechanisms including, but not limited to, encryption, access control, user identification and authentication, malicious content detection, audit, and physical and environmental control.				
Applicable Service Delivery Points: All NMCI Voice, Video, and Data Service Delivery Points				
Levels of Services: 3: (Basic, High End, Mission Critical)				
Performance Category 1: Security Incident Reporting				
Performance Measure Description: Time required to document and report security incidents. Criteria will be developed, outlining the definition of a security incident.				
Who: Vendor & Government		Frequency: Continuous, reports monthly		
Where: End user & operations center		How measured: The time it takes to document and report a security incident after it's been determined that an incident has occurred.		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	1 week	1 day	1 week / 1 day	1 week / 1 day
Level of Service (2)	1 week	1 day	1 week / 1 day	1 week / 1 day
Level of Service (3)	1 hour	1 hour	1 hour / 1 hour	1 hour / 1 hour
Performance Category 2: Security Incident Response				
Performance Measure Description: Time required to respond to a security incident. Response means analyzing the reported incident and taking appropriate action (e.g. installing operating system patch, new virus signature, etc.) Note that where appropriate Government directed timeframes provided with IAVAs, INFOCON levels, etc. will take precedence over the B-Values provided. Criteria will be developed, outlining the definition of a security incident, and the appropriate actions required for a response.				
Who: Vendor		Frequency: As required		
Where: Operations center		How measured: The time it takes to respond to a security incident.		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	1 day	1 day	1 day / 1 day	1 day / 1 day
Level of Service (2)	1 day	1 day	1 day / 1 day	1 day / 1 day
Level of Service (3)	1 hour	1 hour	1 hour / 1 hour	1 hour / 1 hour
Performance Category 3: Security Product Refresh				
Performance Measure Description: Time required to distribute new/revised security hardware and software. Note: These product updates shall have completed security testing and integration prior to implementation. Note: This SLA is not applicable for real time security fixes that are mandated to be completed in shorter time frames (i.e., IAVA, INFOCON, etc…)				
Who: Vendor & Government		Frequency: As required		
Where: End user and Operations center		How measured: The time it takes to distribute new/revised security hardware/software after it has been determined to be a valid NMCI requirement.		

	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	6 months	6 months	6 months / 6 months	6 months / 6 months
Level of Service (2)	3 months	3 months	3 months / 3 months	3 months / 3 months
Level of Service (3)	1 month	1 month	1 month / 1 month	1 month / 1 month
Performance Category 4: Security Vulnerability Remediation				
Performance Measure Description: Time required to implement real time system fixes/patches to address security vulnerabilities. Real time system fixes and patches are those required to be implemented prior to the next scheduled configuration update. (Note: Implementation of Information Assurance Vulnerability Alerts (IAVAs) shall be in accordance with required timeframes)				
Who: Vendor & Government		Frequency: As specified by policy		
Where: All end users and systems		How measured: The time it takes to implement real time system fixes/patches to address security vulnerabilities		
	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	1 day	1 day	1 day / 1 day	1 day / 1 day
Level of Service (2)	8 hours	8 hours	8 hours / 8 hours	8 hours / 8 hours
Level of Service (3)	1 hour	1 hour	1 hour / 1 hour	1 hour / 1 hour

Service Name: Integrated Configuration Management **SLA: 36A**			
Service Description: Maintain a configuration management system including an asset inventory of all hardware and software. In addition, maintain a logical relationship record of the items in the asset inventory.			
Applicable Service Delivery Points: All data seats, fixed and secure voice devices, video teleconferencing seats, and all NMCI infrastructure and external networks.			
Levels of Services: 1: (Enterprise)			
Performance Category 1: Time to update CM system.			
Performance Measure Description: Time to update configuration management system after change to asset configuration. The monthly report will aggregate and average system updates by site and by level of service.			
Who: Vendor		Frequency: Measured daily and reported monthly	
Where: NMCI wide		How measured: The measurement is the elapsed time from the trouble ticket resolve time and the time the record in update in the configuration management system. The logical relationship record update is included in the required change.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		24 hours	24 hours

Service Name: Integration and Testing			**SLA: 36B**
Service Description: An adequate level of testing will be performed by the vendor to minimize the effects of modifications of the NMCI configuration, both initially and through the life of the NMCI contract. When modifying the user's existing configuration, (e. g., applying maintenance or technology refreshment enhancements), the contractor will minimize the time to complete the modification, and test the system to minimize impact to users.			
Applicable Service Delivery Points: All NMCI Components			
Levels of Services: NMCI wide			
Performance Category 1: Time to Configure Asset			
Performance Measure Description: Calculation of time to configure will be based on the elapsed time from when the vendor removes the device from service to configure until that device is returned with the updated baseline. The measurement is a monthly aggregate of the average time to configure asset by site.			
Who: Vendor		Frequency: Monthly	
Where: NMCI wide		How measured: Report number of business days from time the device is removed until updated device is returned for service.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		4 days	4 days
Level of Service (2)		3 days	3 days
Level of Service (3)		3 days	3 days
Performance Category 2: Test Coordination with the Government			
Performance Measure Description: Systems, products, and services are coordinated with the Government as introduced. The vendor will provide Government with project schedules for system, product, and services roll out.			
Who: Vendor		Frequency: Monthly	
Where: NMCI wide		How measured: Vendor reports the measured improvement in cost or technical performance for technology insertion projects completed during the year, along with supporting data. Vendor calculates the benefit significance of each technology insertion project completed, weighted by cost benefit, and aggregates with all other technology insertion projects completed.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		5-10%	5-10%
Level of Service (2)		10-20%	10-20%
Level of Service (3)		> 20%	> 20%

Service Name: Technology Refreshment			**SLA: 36C**
Service Description: Technology Refreshment includes the periodic replacement of NMCI data seats with more capable machines. Refresh of servers, telephone, telephone switches, network switches, network routers, and other hardware and infrastructure is accomplished as required to meet appropriate SLA performance metrics.			
Applicable Service Delivery Points: Fixed Workstations seats, Portable Seats, the Embarkable Workstation (Contractor Provided), and Embarkable Portable Seat (Contractor Provided)			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Workstation Refreshment			
Performance Measure Description: Workstation refreshment is defined in terms of the minimum acceptable refresh period. Workstation hardware will be refreshed on or before it reaches 36 months in age from date of manufacture. This metric applies to all workstations (desktops and laptops) in the NMCI inventory, including those previously owned by the Government that are capitalized by the contractor following contract award. Performance is calculated and reported by site.			
Who: Vendor		Frequency: Continuously monitored and reported monthly for the first 18 months and quarterly thereafter.	
Where: NMCI wide		How measured: Existing computer inventory including date of scheduled and actual refresh.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		36 months	36 months
Level of Service (2)		36 months	36 months
Level of Service (3)		As Applicable	As Applicable
Performance Category 2: Refreshment Timeliness			
Performance Measure Description: Refreshment timeliness is the percentage of refreshments that are completed within or before the quarter scheduled.			
Who: Vendor		Frequency: Annually	
Where: NMCI wide		How measured: Divide the number of technology refreshments that are completed within or before the quarter scheduled by the total number of technology refreshments scheduled for and completed that year.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.85	0.85
Level of Service (2)		0.95	0.95
Level of Service (3)		0.95	0.95
Performance Category 3: Average Relative Performance of Refreshment Workstations			
Performance Measure Description: Average relative performance is the average of the relative performance of workstations provided for refreshment compared to the performance of “state-of-the-shelf” workstations available at the time of refreshment. Level of Service (LOS) 1 requires performance of the workstation provided for refreshment to be greater than or equal to 70% of the performance of the high-end commercially available state-of-the-shelf workstations. LOS 2 requires performance of the workstation provided for refreshment to be greater than or equal to 90% of the performance of high-end commercially available state-of-the-shelf workstations. The LOS 3 value is either 1 or 2 dependent on the required level of performance for the mission critical workstation.			

Who: Vendor		Frequency: Continuous monitoring, monthly reported	
Where: NMCI-wide		How measured: Relative performance of refreshment workstations is expressed as a percentage of the performance of a high-end state-of-the-shelf workstation based on objective test results using test scenarios mutually agreed to by the Government and the contractor. Average relative performance is the average of the relative performance percentages for all workstations provided for technology refreshment during the quarter. .	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		75 %	75 %
Red		**75%**	**75%**
White		**65%**	**65%**
Blue		**60%**	**60%**
Thin Client		**50%**	**50%**
Level of Service (2)		90 %	90 %
Level of Service (3)		As Applicable	As Applicable
Performance Category 4: Customer Satisfaction			
Performance Measure Description: Performance to support mission requirements by technology refreshment as measured by site.			
Who: Vendor		Frequency: Initially measured at six month intervals for first year of contract and then yearly thereafter.	
Where: DON-wide		How measured: Customer survey, random sampling of NMCI customers.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (2)		0.85 satisfactory rating	0.85 satisfactory rating
Level of Service (3)		0.85 satisfactory rating	0.85 satisfactory rating

Service Name: Technology Insertion			**SLA: 36D**
Service Description: Vendor will assist the DoN in identifying and applying new technologies to increase the effectiveness of the program and to further advance its overall objectives of reducing costs, streamlining processes, and improving service.			
Applicable Service Delivery Points: All NMCI Infrastructure			
Levels of Services: 3: (Basic, High End, Mission Critical)			
Performance Category 1: Demonstrated Benefit			
Performance Measure Description: Measures the number of technology insertion projects completed during the year for which a beneficial result (increased performance, lower cost, new desired capability) can be measured or demonstrated. A ratio of demonstrated benefit equals the number of technology insertion projects completed during the year that provide measurable benefit as compared to the total number of technology insertion projects completed.			
Who: Vendor		Frequency: Annually	
Where: NMCI wide		How measured: Contractor reports the number of different technology insertion projects completed during the year and the number of those showing measurable beneficial results, in terms of cost reduction, increased performance, or new capabilities.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		.75	.75
Level of Service (2)		.85	.85
Level of Service (3)		.85	.85
Performance Category 2: Benefit Significance			
Performance Measure Description: The percentage of insertion projects performed in terms of improvements in NMCI cost or relevant technical parameters for technology insertion projects completed during the year, as compared to across all technology insertion projects completed during the year. A metric of “noticeable” (5-10%) and “significant” (10-20%) is used to assess impact.			
Who: Vendor		Frequency: Annually	
Where: SDP		How measured: Vendor reports the measured improvement in cost or technical performance for technology insertion projects completed during the year, along with supporting data. Vendor calculates the benefit significance of each technology insertion project completed, weighted by cost benefit, and aggregates with all other technology insertion projects completed.	
	B Value	Pre-Negotiation	Contract SLA
Level of Service (1)		5-10%	5-10%
Level of Service (2)		10-20%	10-20%
Level of Service (3)		> 20%	> 20%

Service Name: Sea-Shore Rotation Support Training

SLA: 37

Service Description: Vendor provided training of Navy and Marine Corps uniformed IT professionals that rotate from sea duty jobs to shore duty jobs over the course of their professional careers. This training supports their IT professional development and career tracks as well as their integration into NMCI related job functions.

Applicable Service Delivery Points: Training Planning

Levels of Services: N/A

Performance Category 1: Skill Maintenance and IT Professional Development

Performance Measure Description: Ability to perform training needs assessment and planning based on evaluation of prior training and experience of each assigned individual. Measured as percentage equal to the number of individuals assigned with training plans judged as satisfactory divided by the total number of personnel assigned. The number assigned is limited to those individuals that are identified under the contract option.

Who: Third Party (Navy and Marine Corps Community Managers)	Frequency: Continuous measured, updated quarterly
Where: Operations center	How measured: Judgment based on established career development policy (overview in attachment 3).

	B Value (Unclassified)	B Value (Classified)	Pre-Negotiation	Contract SLA
Level of Service (1)	0.95		0.95	0.95
Level of Service (2)	N/A		N/A	N/A
Level of Service (3)	N/A		N/A	N/A

Performance Category 2: Core Competency Development

Performance Measure Description: Measures contractor performance in training Marine and Sailors to carry out skills identified as core competencies in overview attachment 3. Evaluation of this effectiveness is made by appropriate personnel in gaining commands upon transfer from NMCI assignment. The Government will use standardized testing focused on core competency skills required based on individual specialty and rank. This metric is reported by location based on percentage of people receiving a satisfactory score.

Who: Each individual's Chain of Command	Frequency: Continuous, coincides with military personnel fitness report cycles
Where: Operations center	How measured: Appropriate chain of command evaluates individual's core competency on a regular cycle, and evaluates the vendor's performance in training individuals to attain required core competency.

	B Value (Unclassified)		Pre-Negotiation	Contract SLA
Level of Service (1)	0.95		0.95	0.95
Level of Service (2)	N/A		N/A	N/A
Level of Service (3)	N/A		N/A	N/A